



Department of
Education

2015 Summer Training

Summer Leadership Course 2015

Secondary Preview and Planning Day

Tennessee Department of Education | 2015 Summer Training



Welcome to Summer 2015 Leadership!

Our Goal in this Class:

Help principals understand what is changing in the 2015-16 school year, what support tools are available, and gain a high level overview of teacher training during the summer in order to support implementation.

How Will We Achieve that Goal:

- Peer-Led Discussions and Collaboration
- Direct Applications to Our Classrooms and Schools
- A Focus on Identifying Key Leader Actions

Course Norms:

- Keep students at the center of focus and decision-making.
- Balance urgency and patience.
- Be solutions-oriented.
- Speak Up!
- We need collective solutions. Be present and engaged.
- Challenge with respect.
- Risk productive struggle.
- Monitor airtime and share your voice.

Tennessee Department of Education
Summer 2015 Leadership Course
Secondary Session

Agenda and Table of Contents

Agenda	Key Reference Materials
Opening Session 8:00-8:30 a.m.	Class Goals and Objectives, Guiding Principles and Norms, Key Questions, Tennessee Professional Learning Standards Overview, Shared Leadership Reflection
Updates: Putting TNReady in Context 8:30-9:00 a.m.	TNReady Communications Resources, Accountability Updates,
Accessibility Features of TNReady 9:00-9:30 a.m.	Overview of TNReady Accommodation and Accessibility Features, Video Resources
Break 9:30-9:45 a.m.	
English Language Arts 9:45-10:30 a.m.	Teacher Training Content Overview, Leader Reflections and Actions, Redelivery Framing
Mathematics 10:30-11:30 p.m.	Teacher Training Content Overview, Leader Reflections and Actions, Redelivery Framing
Lunch 11:30 a.m.-12:45 p.m.	
Social Studies 12:45 p.m.-1:30 p.m.	Teacher Training Content Overview, Leader Reflections and Actions, Redelivery Framing
Break 1:30-1:45 p.m.	
Shared Leadership and Planning 1:45-2:45 p.m.	Guided Planning: “Why, What, How” for 2015-15 at your school
Module Seven MICA 2:45-3:45 p.m.	Overview of MICA, Video Resources, Leader Reflections and Actions
Closing 3:45-4:00 p.m.	

Class Goals

The Summer Leadership Preview and Planning Day has been designed with the school principal in mind. Both the ***Tennessee Standards of Professional Learning*** as well as the ***TEAM Administrator Evaluation Rubric*** are built on the foundation of shared leadership within the school. School principals are faced with increasingly complex instructional decisions and engaging teacher leaders within this decision-making process is crucial to ensure optimal support for teachers and students.

As we approach the day, please take a few moments to read through these excerpts from our ***Tennessee Standards for Professional Learning*** and our ***TEAM Administrator Rubric***.

From the ***Tennessee Standards for Professional Learning***:

<i>Professional learning that increases educator effectiveness and results for all students ...</i>	LEARNING COMMUNITIES: Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.	LEADERSHIP: Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.
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From the ***Tennessee TEAM Administrator Rubric***:

Indicator	5
A1: Capacity Building Builds capacity of educators to provide all students a rigorous curriculum, aligned with Tennessee-adopted standards	Utilizes shared leadership practices to build capacity of nearly all educators for: <ul style="list-style-type: none"> Developing an accurate understanding of Tennessee-adopted standards and instructional practices Studying, analyzing, and evaluating approved curriculum resources, including texts Maintaining shared accountability when making needed adjustments to deepen classroom rigor Maintaining a system for monitoring student work for rigor and curriculum alignment Implementing on-going strategies and feedback for peers

Indicator	5
<p>B1: Leveraging Educator Strengths</p> <p>Leverages educator strengths to engage all students in meaningful, relevant learning opportunities</p>	<ul style="list-style-type: none"> Engages with the school leadership team to review multiple data sources (including school goals and student learning needs) to determine optimal educator grade level and/or content area placement Creates a coherent system to extend impact of educators at all performance levels Develops and/or sustains a collegial environment where learning communities use their collective strengths, skills, and experience to improve classroom practice
<p>C2: Differentiated Professional Learning</p> <p>Engages faculty and self in data-informed, differentiated professional learning opportunities for educators, aligned with the <i>Tennessee Standards for Professional Learning</i></p>	<ul style="list-style-type: none"> Ensures all professional learning activities align with the Tennessee Standards for Professional Learning Engages leadership team to: <ul style="list-style-type: none"> differentiate professional learning opportunities based on educator needs and preferences facilitate implementation of knowledge and skills gained from professional learning activities Develops accountability structures whereby nearly all educators seek to share knowledge gained from learning opportunities
<p>C4: Teacher Leaders</p> <p>Identifies and supports potential teacher-leaders and provides growth opportunities in alignment with the <i>Tennessee Teacher Leadership Standards</i></p>	<p>Engages with leadership team to:</p> <ul style="list-style-type: none"> Involve teacher-leaders in activities aligned with the Tennessee Teacher Leadership Standards Use a variety of data to identify potential teacher-leaders Communicate a clear leadership pathway for potential teacher-leaders Provide sufficient growth opportunities to address specific leadership actions and behaviors Provide potential teacher-leaders with varied leadership opportunities Monitor teacher-leaders in a variety of settings and providing specific feedback to support their continued development



Alignment of the Spring 2015 Leadership Course to the TEAM Administrator Rubric

The Division of Curriculum and Instruction and the Division of Teachers and Leaders have partnered in ensuring that the activities of the Spring 2015 Leadership Course and the accompanying Bridge to Practice exercises are aligned to practices and outcomes in the TEAM Administrator Evaluation Rubric.

During both **Class One** and **Class Two**, Leadership Course participants will be engaging in collaborative professional learning and evaluating school and district instructional practices for the purpose of implementing a model of continuous improvement. Upon return to their schools and districts, participants will be equipped with several opportunities to engage with their school and district Leadership Teams in facilitating ongoing learning and instructional planning for all teachers.

School and district leaders are strongly encouraged to utilize the learning opportunities provided in the Spring 2015 Leadership course to make connections to the following indicators of the TEAM Administrator Evaluation Rubric:

- **Indicator A1: Capacity Building:** Builds capacity of educators to provide all students a rigorous curriculum, aligned with Tennessee-adopted standards.
- **Indicator A2: Data Analysis and Use:** Collaborates with educators to analyze multiple forms of data throughout the year to establish specific goals and strategies targeting student achievement and growth.
- **Indicator B2: Leveraging Educator Strengths:** Leverages educator strengths to engage all students in meaningful, relevant learning opportunities.
- **Indicator B4: Ownership:** Models and communicates expectations for individual and shared ownership of student, educator, and school success.
- **Indicator C1: Evaluation:** Implements and monitors a rigorous evaluation system using an approved Tennessee evaluation model and uses educator evaluation data to inform, assess, and adjust professional learning goals and plans.
- **Indicator C2: Differentiated Professional Learning:** Engages faculty and self in data-informed, differentiated professional learning opportunities for educators, aligned with the *Tennessee Standards for Professional Learning*.
- **Indicator C4: Teacher Leaders:** Identifies and supports potential teacher-leaders and provides growth opportunities in alignment with the *Tennessee Teacher Leadership Standards*.

More information about the TEAM Administrator Evaluation process can be found at: <http://team-tn.org/evaluation/administrator-evaluation/>.

Questions?

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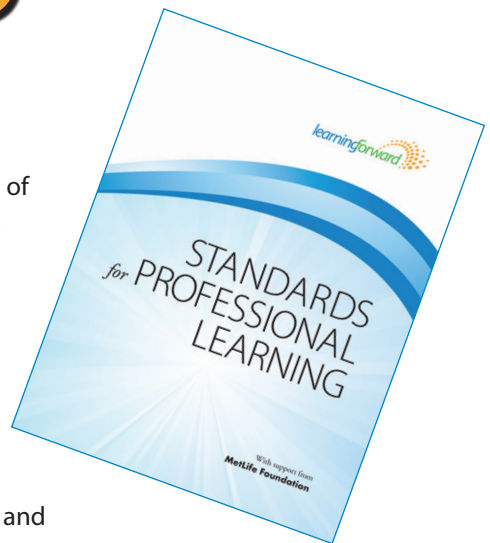
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STANDARDS *for* PROFESSIONAL LEARNING

Quick reference guide

About the standards

This is the third version of standards that outline the characteristics of effective professional learning. This edition, drawn from research and based on evidence-based practice, describes a set of expectations for effective professional learning to ensure equity and excellence in educator learning. The standards serve as indicators that guide the learning, facilitation, implementation, and evaluation of professional learning.



With support from
MetLife Foundation

As with earlier versions of the standards, including the last revision in 2001, Learning Forward invited representatives from leading education associations and organizations to contribute to the development of the standards. Together, these representatives reviewed research and best practice literature to contribute to the standards revision with consideration of their own constituencies, including teachers, principals, superintendents, and local and state school board members.

STANDARDS FOR PROFESSIONAL LEARNING			
<i>Professional learning that increases educator effectiveness and results for all students ...</i>	LEARNING COMMUNITIES: Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.	LEADERSHIP: Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.	RESOURCES: Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.
DATA: Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.	LEARNING DESIGNS: Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.	IMPLEMENTATION: Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long-term change.	OUTCOMES: Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards.

Relationship between professional learning and student results

1. When professional learning is standards-based, it has greater potential to change what educators know, are able to do, and believe.
2. When educators' knowledge, skills, and dispositions change, they have a broader repertoire of effective strategies to use to adapt their practices to meet performance expectations and student learning needs.
3. When educator practice improves, students have a greater likelihood of achieving results.
4. When student results improve, the cycle repeats for continuous improvement.

This cycle works two ways: If educators are not achieving the results they want, they determine what changes in practice are needed and then what knowledge, skills, and dispositions are needed to make the desired changes. They then consider how to apply the standards so that they can engage in the learning needed to strengthen their practice.



4 prerequisites for effective professional learning

The seven new standards focus attention on educator learning that relates to successful student learning. Implicit in the standards are several prerequisites for effective professional learning. They are so fundamental that the standards do not identify or describe them. These prerequisites reside where professional learning intersects with professional ethics.

Professional learning is not the answer to all the challenges educators face, but it can significantly increase their capacities to succeed. When school systems, schools, and education leaders organize professional learning aligned with the standards, and when educators engage in professional learning to increase their effectiveness, student learning will increase.

1 Educators' commitment to students, all students, is the foundation of effective professional learning.

Committed educators understand that they must engage in continuous improvement to know enough and be skilled enough to meet the learning needs of all students. As professionals, they seek to deepen their knowledge and expand their portfolio of skills and practices, always striving to increase each student's performance. If adults responsible for student learning do not continuously seek new learning, it is not only their knowledge, skills, and practices that erode over time. They also become less able to adapt to change, less self-confident, and less able to make a positive difference in the lives of their colleagues and students.

2 Each educator involved in professional learning comes to the experience ready to learn.

Professional learning is a partnership among professionals who engage with one another to access or construct knowledge, skills, practices, and dispositions. However, it cannot be effective if educators resist learning. Educators want and deserve high-quality professional learning that is relevant and useful. They are more likely to fully engage in learning with receptive hearts and minds when their school systems, schools, and colleagues align professional learning with the standards.

3 Because there are disparate experience levels and use of practice among educators, professional learning can foster collaborative inquiry and learning that enhances individual and collective performance.

This cannot happen unless educators listen to one another, respect one another's experiences and perspectives, hold students' best interests at the forefront, trust that their colleagues share a common vision and goals, and are honest about their abilities, practices, challenges, and results. Professional accountability for individual and peer results strengthens the profession and results for students.

4 Like all learners, educators learn in different ways and at different rates.

Because some educators have different learning needs than others, professional learning must engage each educator in timely, high-quality learning that meets his or her particular learning needs. Some may benefit from more time than others, different types of learning experiences, or more support as they seek to translate new learning into more productive practices. For some educators, this requires courage to acknowledge their learning needs, and determination and patience to continue learning until the practices are effective and comfortable.

SUGGESTIONS FOR USE

Standards for Professional Learning are designed to set policies and shape practice in professional learning. Improvement is a continuous process without a beginning or end. Because professional learning is at the core of every effort to increase educator effectiveness and results for all students, its quality and effectiveness cannot be left to chance. The standards will guide the efforts of individuals, teams, school and school system staff, public agencies and officials, and nonprofit and for-profit associations or organizations engaged in setting policy, organizing, providing, facilitating, managing, participating in, monitoring, or measuring professional learning to increase educator effectiveness and results for all students.

These standards stimulate dialogue, discussion, and analysis that lead to increased effectiveness in professional learning regardless of the state of current practice. Here are several suggestions for how various types of educators may use the standards to deepen their understanding of effective professional learning and how to strengthen professional learning for all educators. The book *Standards for Professional Learning* (Learning Forward, 2011; see ordering information at right) offers a more comprehensive list.

INDIVIDUALS CAN:

- Study the standards to develop a foundational knowledge about effective professional learning.
- Use the standards to request improvements in professional learning in which they participate.
- Apply the standards to the planning, design, facilitation, and evaluation of professional learning they lead.

SCHOOL STAFF CAN:

- Share the standards with external assistance providers who facilitate professional learning with school staff.
- Share the standards with parents, guardians, and community members to foster their support for professional learning as a means to increase student learning.
- Bring the standards into all program implementation or improvement discussions.

SCHOOL SYSTEM STAFF CAN:

- Post the standards on or link to the standards from the school system's website.
- Use the standards as criteria for evaluating the effectiveness of all professional learning.
- Prepare a resolution that the school trustees adopt the standards as expectations for all professional learning.

MORE TO COME



Learning Forward, with continuing support from MetLife Foundation, will develop additional tools to support the implementation and evaluation of the standards.

“Using the standards to shape more effective professional learning will require study, thought, discussion, and planning.”

— *Standards for Professional Learning*

ORDER THE STANDARDS TODAY

Have at your fingertips the full text of the standards, including in-depth elaborations for all seven standards, related research citations, a comprehensive introduction, crosswalk between the previous and current versions, and more complete suggestions for use.

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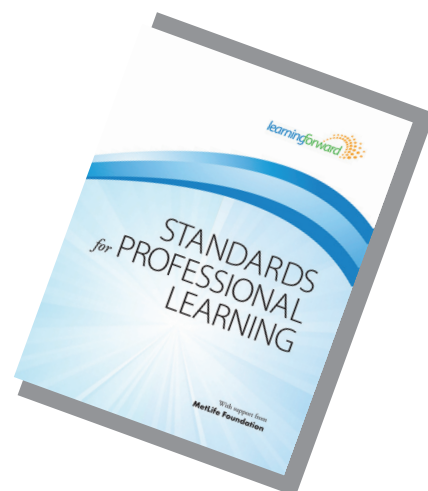
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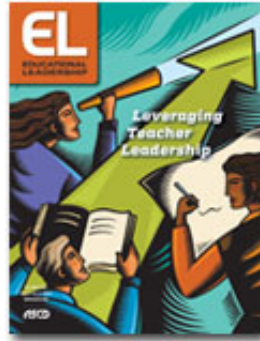
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October 2013 | Volume 71 | Number 2

Leveraging Teacher Leadership Pages 62-66

How Principals Cultivate Shared Leadership

Terry Wilhelm

In a shared leadership school, the principal maintains a delicate balance—giving teachers responsibility without abdicating all authority.

Traditional teacher leaders function in traditional ways, usually through the time-honored roles of department chair and grade-level chair. But with educators being held accountable for higher and higher student outcomes, schools need to make a major shift from traditional teacher leadership to shared leadership. Principals can no longer lead instructional reform alone: The voice and expertise of teachers are essential to improve teaching and learning. As Timothy Waters and the coauthors of *Balanced Leadership* (2009) write,

The future demands on the school principal are massive. In order to meet the needs of all stakeholders, the principal needs to learn to share leadership responsibilities while understanding the implications of introducing change. (p. 8)

What's the Difference?

How do teacher leadership roles in a shared leadership school differ from those in a traditional one?

In a traditional school, the leadership team is typically composed of department chairs or grade-level representatives who meet periodically with administrators to discuss procedural and operational issues; they then take information back to their respective groups and perhaps gather input for the next meeting. These traditional teacher leaders may also have specific operational duties, such as ordering textbooks and supplies for their departments or making room assignments. They may also create agendas and keep minutes for their respective groups' meetings, which they submit to the administration.

In contrast, in a shared leadership school—often called a professional learning community—all adults continually learn together so that every student achieves at the highest levels. In my role as a consultant and facilitator, I have worked with such schools to help teacher leaders effectively guide and manage the work of teams of course-alike or grade-level peers. At the secondary level, these teams are likely to be smaller and more specialized than an entire department; the math department, for example, may have four to six course-alike teams. The teams, led by teacher leaders, work directly in the areas of curriculum, instruction, and assessment. Their chief concern is student learning.

Back at the traditional site, the typical reaction to the idea of teachers taking on leadership roles in areas directly related to improving student learning might be summed up in the statement, "That's administration's job." Thus, one of the most dramatic—and probably most important—ways that teacher leader roles change in a shared leadership school is that teachers feel an increased sense of ownership for improving student outcomes throughout the school, not just in their classrooms. At one middle school where I facilitated teacher leadership team development, a teacher leader put it this way at the end of the first year: "At our school, it's no longer 'my kids.' Now, it's 'our kids.'"

The Principal's New Role: Trainer of Trainers

To create a shared leadership school, the principal must become a staff developer. This does not mean the principal must become a star trainer for delivering whole-staff professional development; teacher leaders can eventually assume those roles, if and when whole-staff professional development is appropriate. But most professional development will occur in the course-alike or grade-level team meetings led by the teacher leaders. Thus, the principal must become the informal trainer of trainers for the teacher leaders because, unfortunately, most teacher preparation programs offer nothing to help teachers develop the skills required for a shared leadership role. These skills include

- Leading colleagues in analyzing student work and achievement data.
- Facilitating group discussions about improved instructional practices.
- Locating research-based methods and strategies that may be outside the current collective team expertise.
- Putting structures in place for team members to hold one another accountable for trying and using the strategies.
- Comparing results for various strategies tried.

Simply assigning teachers to teams and asking them to collaborate in these new ways reminds me of putting students into groups and expecting cooperative learning to occur like spontaneous combustion. As a teacher, I initially found cooperative learning so frustrating that I put the students right back into rows after a couple of failed attempts. They didn't know how to cooperate! No more cooperative learning for them! The real problem, obviously, was that I didn't know how to teach them to cooperate.

I am happy to report that in time, I became a fairly proficient practitioner of cooperative learning—but it required both training and practice. More important, it also required a fundamental shift in the way I saw my own role. I understand in hindsight that being a slightly Type-A teacher, I really preferred to be at the front of the room running the show myself.

Principals may have similar trouble relinquishing control. The willingness to share leadership is the necessary precursor to developing the new skills they need to become a trainer of trainers for their teacher leaders. The willingness must come first, derived from the principal's authentic perception that shared leadership will be superior to solo leadership.

Common Missteps

With no formal preparation for sharing leadership, some principals convene leadership teams with the intent of sharing leadership, but then fail to provide the support the teacher leaders need. For example, one principal asked his team leaders to have their teams identify their top-10 items to include in the district's new quarterly benchmark assessments; he failed, however, to inform the staff as a whole of the initiative and did not work with the team leaders to help them learn how to facilitate such a discussion. Without any symbolic authority for the task, and with no preparation, the team leaders encountered so much pushback from their peers that the initiative simply died, leaving the teacher leaders feeling burned and disenchanted.

Sometimes principals start down the path of shared leadership, but then they don't allow the teacher leaders to participate in meaningful leadership tasks for the school, perhaps because they fear losing control. For example, one principal convened a new leadership team after attending a conference on professional learning communities with some key teacher leaders. The discussions were initially enthusiastic, but as time passed and none of the ideas and initiatives moved forward, the team members concluded that this was just another passing fad.

Sometimes a misguided principal may completely abdicate important aspects of leadership to the wholly unprepared leadership team. Vital schoolwide decisions are neglected and key responsibilities go unfilled because the bewildered teacher leaders do not see themselves as the ones who should take care of such responsibilities—nor do they have the skills or symbolic authority with peers that are necessary for success.

In one cohort of leadership teams, a passionate discussion arose in a team meeting about student interventions. Strangely, the principal began texting on her cell phone; she eventually pushed her chair away from the table as the confused team members were looking to her for direction. Not surprisingly, the team could not agree on what action to take, and almost every team member privately expressed considerable frustration after the session. As the session facilitator, I questioned the principal later about what I had observed. She responded, "I wanted them to make the decision." She had clearly misjudged the situation, overestimating her team's readiness and missing all their signals that her guidance and participation were essential.

As the term *shared* implies, shared leadership does involve sharing some decision making and other responsibilities, but it is not abdication, and it is quite different from simple delegation. Assuredly, there are certain routine tasks and responsibilities that a principal can and should delegate to experienced staff members, including classified staff—for example, responding to parents' concerns when the principal is temporarily unavailable or contacting specific district office departments for support with maintenance issues. But developing the depth of shared leadership necessary for transforming a school into a professional learning community does not happen overnight, and it is not completed in a few months.

A Balance for Growth: Direction and Support

Shared leadership is a developmental process that becomes more effective after two years than after one and continues to grow—along with student outcomes—the longer it is thoughtfully and intentionally fostered. Teachers grow as leaders as they incrementally learn new skills together in a safe environment encouraged by the principal and then apply these skills in their

course-alike or grade-level team collaborations.

Recently, I had the delightful opportunity to reconnect with Carla Najera, principal of Natomas Middle School in Sacramento, California, which had implemented a cohort of school leadership teams several years ago. Since that time, she reported, shared leadership had continued to grow. The Natomas leadership team recently revised the form that collaborative teams used to guide their discussions and document their work as they analyze common assessments, discuss best practices, determine strategies that did or did not work, and plan for upcoming instruction. The teacher leaders initiated this change because they felt that the original form, which included considerable detail to guide teams' work when collaboration was new at the school, had become cumbersome given their present level of skill in collaborative tasks.

Principal Najera also related how Natomas Middle School's English team leaders approached her with a thoughtful proposal to implement students' use of Cornell Notes schoolwide. This initiative included extended work in planning and design, with the English teachers finally providing training to the rest of the staff—all with the full involvement and support of the principal. Najera has noted in her classroom walk-throughs that the strategy is consistently implemented by teachers. Long-time Natomas teacher leader Erik Jones said,

[In many schools] teachers have these kinds of ideas often. How the idea is received by the administrator often dictates whether the idea dies before it can see fruition or is grown and developed into a possible dynamic component of a school.

Najera's approach is key to success in shared leadership: It demonstrates a delicate balance that enables her to provide needed direction while supporting teacher teams' creativity and initiative. Her stated and material support of the English teachers' proposals ensured full implementation by their colleagues in other departments, but she gave these teacher leaders the autonomy to use the expertise she perceived in them to develop the initiatives—always with her supportive guidance, questioning, and suggestions.

A Plan for Developing Teacher Leaders

Although there is no established sequence for developing teachers as leaders in a shared leadership school, an essential first step is to ensure that the leadership team has the right players. There is no need to eliminate or replace department chairs or other formal groups that have a sanctioned place in the school's culture. Some principals find that it works best to keep these groups in place while forming a new team for the specific purpose of developing shared leadership. Some teachers on the traditional leadership team may be members of the new team as well.

It may be helpful to give this new team a new name. In California's Beaumont Unified School District, the new teams were called the Instructional Leadership Council (ILC). Some ILC members continued to serve as department chairs at the secondary schools or grade-level chairs at the elementary schools. Others were new to any formal leadership role. Principals wanted to avoid the term *leadership team* because it had specific, historical connotations that were not necessarily consistent with the new roles.

Instructional Leadership Council members were selected by the principal—not voted in by their colleagues—to ensure that the members met important criteria, such as being open, having strong instructional skills, displaying a commitment to improving their schools, and having the respect of peers.

Principals who want to develop shared leadership in a professional learning community soon realize that sufficient time must be set aside within the school day on a regular basis (for example, weekly). However, a frequently missed point is that the teacher leaders of the collaborative teams also need regularly scheduled time to meet as a group with the principal to develop their leadership skills.

Given that leadership development is progressive and developmental, how does the training of teacher leaders play out in sequences and timelines? Obviously, development differs from site to site, but for a sample sequence, see "Outline: Training Sessions for Team Leaders" on p. 62.

In my experience, it is ideal for an entire district to begin moving into shared leadership, with teams from all the schools (with their principals) convening on a regular basis, such as bimonthly. That way, teacher leaders at all sites can develop strong skill sets for leading their peers, and principals throughout the district can begin to share leadership consistently.

However, a single school can also begin to implement shared leadership without a district-led professional development plan or structure. A principal may not be able to release the team for an entire day at a time, as a district might do with a cohort of teams. But meeting weekly or biweekly for shorter periods can provide comparable support and learning, helping teacher leaders acquire a growing repertoire of skills. It simply requires a commitment to carving out the time to convene the group of teacher leaders and intentionally planning the learning agenda for each meeting so it isn't simply "another meeting." Over time, team members can begin to assist in planning and facilitating their own team learning.

Two resources I recommend to principals who are beginning this work are *Learning by Doing: A Handbook for Professional Learning Communities at Work, Second Edition* (DuFour, DuFour, Eaker, & Many, 2010) and [School Leadership That Works: From Research to Results](#) (Marzano, Walters, & McNulty, 2005). Each team member should get his or her own copy of each book. One way to use the books is to have preassigned chapter readings followed by group discussions, but using real-time strategies when the group is together, like jigsaws or reading cascades, prevents feelings of having "homework" for the new role. Select chapters or portions of chapters intentionally on the basis of the teacher leaders' needs and the levels at which

their individual teams are functioning.

Ownership, Not "Buy-In"

The rewards of seeing teachers develop as leaders are intensely satisfying. Shared leadership is a powerful path to school improvement because it generates ownership of schoolwide student outcomes.

This ownership is missing in many schools. Although teachers care about the success of their own students, even the most dedicated teacher may not feel the same level of concern about the rest of the students in the grade level, department, or school. The principal may be the only one feeling such responsibility—a heavy weight to carry alone—and so he or she may find it frustrating to attempt to get buy-in from teachers for improvement initiatives. Buy-in is a weak and relatively useless concept—nearly every staff includes teachers whose buy-in to past initiatives never amounted to more than lip service. In contrast, the process of building shared leadership creates *ownership*. Ownership thoroughly trumps buy-in.

So principals, embark on the adventure of developing shared leadership with your teachers. The need has never been more urgent, nor the opportunity more ripe. What we can accomplish together is far greater than what any of us can accomplish alone.

Outline: Training Sessions for Team Leaders

Here is a typical outline for a series of full-day training sessions for a cohort of school leadership teams. The timeline can vary, but over the course of the first year, the following topics can be addressed in five to six full-day sessions. (For a principal who is meeting his or her leadership team in shorter, more frequent sessions on-site, these topics can be broken into smaller segments.)

- Roles and responsibilities of team members (contrast with previous traditional leadership team roles and responsibilities).
- How to develop, implement, and stick to effective group norms.
- Effective meeting agendas.
- Practicing specific discussion protocols to use in collaborative team meetings (for example, protocols for discussing student work or for reviewing benchmark data).
- Troubleshooting and responding to resistance (this may be done in every session).
- Cultural assessments ([Learning by Doing](#) by Rick DuFour, Rebecca DuFour, and Thomas Many has many downloadable tools).
- Planning whole-staff professional development sessions.

In every session, participants add to their tool kit (a running list kept by each member of new skills, norms, protocols, celebration activities, focusing activities, role cards, and charts for group memory). Between sessions, team leaders apply their new skills as they lead collaborative meetings back at their sites. The next session begins with reporting successes and challenges arising from those meetings.

References

- DuFour, R., DuFour, R., Eaker, R., & Many, T. (2010). *Learning by doing: A handbook for professional learning communities at work* (2nd ed.). Bloomington, IN: Solution Tree.
- Marzano, R., Waters, T., & McNulty, B. (2005). [School leadership that works: From research to results](#). Alexandria, VA: ASCD.
- Waters, T., Cameron, G., Melver, M., Eck, J., Kearns, J., Seebaum, M., et al. (2009). *Balanced leadership: School level leadership—An overview (facilitators' manual)*. Denver, CO: Mid-Continent Research for Education and Learning (McREL).

[Terry Wilhelm](#) is the founder and owner of [Educators 2000](#), whose website includes other resources related to shared leadership. She is a district-level consultant who works with educators nationwide.

KEYWORDS

Click on keywords to see similar products:

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Key Questions for Today (Secondary)

Our key questions for today anchor our professional conversation and learning across today's seven modules. These key questions will help frame your collaborative planning with your school's Learning Leaders to create and implement a student and teacher support plan for the coming grounded in Tennessee's Standards for Professional Learning, the TEAM evaluation rubrics, and a commitment to shared leadership.

The modules are designed to give school leaders an overview of teacher training content so that school leaders (administrators) and teacher Learning Leaders can design a coordinated redelivery and support process.

1. **English Language Arts:** How do teachers help build an interconnectedness between reading and writing and its impact on instruction and student learning?
2. **Social Studies:** How do the literacy shifts in the new social studies expectations impact instructional practices?
3. **Accessibility and Accommodation Features:** What are the accessibility and accommodation features of TNReady that help support optimal success?
4. **Mathematics:** How can leaders focus on supporting teachers to impact student success in mathematics?
5. **Shared Leadership and Planning:** How can we work with our Learning Leaders to continue momentum and focus into the school year by supporting teachers in reflective practices at key intervals?
6. **Accountability Updates:** What important accountability updates impacting my school are known at this time?
7. **MICA:** How can I best support my teachers' access and use of MICA?

Tab 1

Module One:

Updates Putting TNReady in Context

On Tab, write “Updates”

Accountability Updates Notes Tracker

Topic	Key Points	Other Notes/Plans
School Accountability and Designations		
School and District Data Release		
TVAAS Data Release		
TVAAS Transition to TNReady		
Teacher Evaluation Update		
TVAAS Resources		



TNReady Question Types

TNReady will replace the state's TCAP multiple-choice only tests in reading and math and will include a variety of question types as well as writing. Students will read from texts and offer text evidence to support their answers. They will solve multi-step math problems, many without using a calculator, to show what they know. TNReady tests will be more interactive and taken online to make them more engaging for students and easier for educators to view and share results. The test will include:

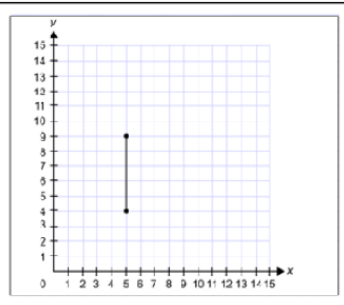
Questions that are Interactive

- Engage students to manipulate items; move around concepts or graphics; or complete exercises that reflect real work activities such as editing a paper or graphing an equation.

One side of a pentagon with vertices at (5, 4) and (5, 9) are shown.

Use the Connect Line tool to draw the remaining sides of the pentagon with these conditions:

- at least two sides each have a length of 5 units, and
- at least one side has a length of 8 units.



Questions that are Open Ended

- Ask students to type an answer where no choices are given and provide an open-ended response
- Hand scored by trained reviewers using a scoring rubric

What is the main idea of paragraph 4?
Type your answer in the space provided.

Questions that Ask students to Support their Answer

- Two part question
- Typically Part B requires the student to choose a piece of evidence using the text to support their answer in Part A

Part A

Which is a central idea of the passage?

- A) The sea is a place of danger.
- B) Adolescence is a difficult transition into a new life.
- C) Parents usually know what is best for their children.
- D) It is better to trust your own feeling than to trust friends.

Part B

Select the detail from the passage that supports the central idea.

16 At one point during that snorkeling expedition, as I was paddling around through the murk, it suddenly seemed as if the bottom fell out of the ocean floor. I could feel a corresponding drop in the pit of my stomach as the water around me turned colder, and deepened to where I could no longer see the bottom at all. The fact that both my parents were only yards away didn't help: I was certain that I had passed some boundary and entered a world where I did not belong.

Questions that Ask students to Select the Correct Answer

- Ask students to select one correct answer from many options such as a traditional multiple-choice question
- Could also ask students to select multiple correct answers from many options

Select all the expressions that are equivalent to -7 .

- ☐ $-\frac{14}{2} \times \frac{7}{7}$
- ☐ $7 \times -1 \times -1 \times -1$
- ☐ $-4 \times \frac{7}{4}$
- ☐ -7×-1
- ☐ 7^{-1}

Seven Things You Need to Know About TNReady English Language Arts

1.

TNReady will assess students' reading and writing skills together to ensure students are prepared for success after graduation.

TNReady will assess our state ELA standards, a common set of expectations for what students should know and be able to do at the end of a grade. Because reading all types of materials is critical in the real world, students will read and respond to both fiction and non-fiction. You can find the ELA standards here: <http://www.tn.gov/education/standards/english.shtml>.

2.

TNReady will give students and parents clear information about whether they are on track to graduate from high school and be successful in college or the workplace.

Students who do well on TNReady will be prepared for college-level classes.

3.

TNReady will replace the state's multiple-choice only test in reading and will include a variety of reading and writing questions.

TNReady will include: writing that requires students to cite evidence from a text they just read, interactive questions where students organize main ideas or edit a paper, and questions that ask students to justify their answers. Grammar is assessed through student writing and stand-alone editing questions.

4.

TNReady will replace the writing assessment given each February.

Students will receive a single score for English language arts, integrating both writing and reading.

5.

TNReady will be given two separate times during the school year: Part I and Part II.

Part I will be administered in February or March and Part II in April or May. Part I will replace the current writing assessment whereas Part II questions will require less open-ended responses. Block schedules will have adjusted timelines.

6.

Local schools and school systems will have greater flexibility in scheduling TNReady.

TNReady will be administered to students as part of their regular classroom schedule. Schools will only take the assessment for a few days within the testing window, minimizing interference with teaching and learning in classrooms.

7.

TNReady will be administered online to reflect the skills students need to be successful in the real world.

Students will have access to online tools including a notepad and highlighter to support their reading and writing process. Standard tools like spell check, copy/paste, and bold/underline will also be available. If districts need additional time to become online ready, a paper-pencil back up option will be available based on readiness.

Seven Things You Need to Know About TNReady Math

1.

TNReady will assess students' knowledge of both basic and problem-solving skills to ensure they are prepared for success after graduation.

TNReady will assess our state math standards. Academic standards provide a common set of expectations for what students should know and be able to do at the end of a grade. You can find the math standards here: <http://www.tn.gov/education/standards/math.shtml>.

2.

TNReady will give students and parents clear information about whether students are on track to graduate from high school and be successful in college or the workplace.

Students who do well on TNReady will be prepared for college-level classes.

3.

TNReady will replace the state's multiple choice only test in math and will include a variety of questions.

TNReady will include: questions that measure ease of using basic math skills, interactive questions where students graph an equation or draw a line, and questions that ask students to show their work.

4.

TNReady will ask students to solve multi-step problems, many without using a calculator, to show what they know.

Calculators are important tools for college and career readiness. However, students must also be able to demonstrate some basic math skills without the use of a calculator.

5.

TNReady will be given two separate times during the school year: Part I and Part II.

Part I will be administered in February or March and Part II in April or May. Students will receive a single score for math that combines performance on Part I and Part II following the end of the school year. Part I questions will ask students to show their work and explain their reasoning whereas Part II will require less open-ended questions.

6.

Local schools and school systems will have greater flexibility in scheduling TNReady.

TNReady will be administered to students as part of their regular classroom schedule. Students will only take the assessment for a few days within the testing window, minimizing interference with teaching and learning in classrooms.

7.

TNReady will be administered online to reflect the skills students need to be successful in the real world.

If districts need additional time to become online ready, a paper-pencil back up option will be available based on readiness.



How Educators are Involved in Designing TNReady

Tennessee educators – both at the K-12 and higher education levels – were significantly involved in the selection process and chose an assessment that is both fully aligned to the state's academic standards but also adaptable to future improvements.

Moving forward, the design of TNReady, like all assessments in Tennessee, will continue to include significant educator involvement at every juncture: item development and review, scoring, and proficiency cut score determination. Tennessee educators will also decide on changes to the test based on any changes to the standards.

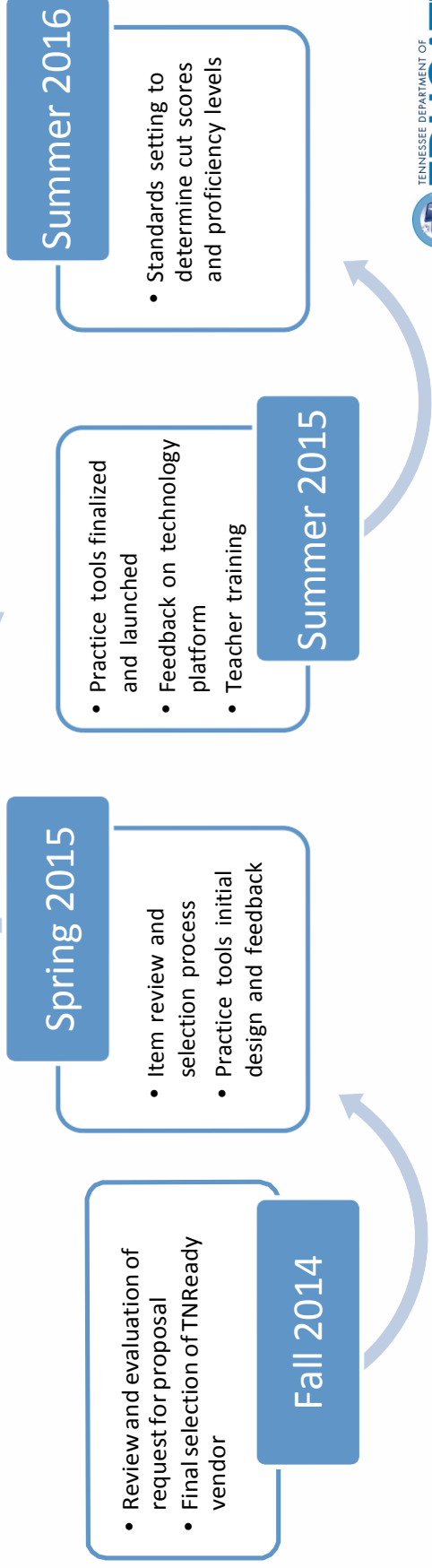
Who's involved?

Educators of all roles and backgrounds will be included: K-12

- Math, English language arts, and special education teachers
- District instructional supervisors and special education directors
- Directors of Schools
- Additional school-based staff (e.g. librarians, media specialists, guidance counselors)

Post-secondary

- Higher education faculty and representatives





Frequently Asked Questions

Who is writing the TNReady test questions?

As with previous state assessments like TCAP, the questions are written by the vendor selected through the competitive bidding process. Test questions are written by assessment professionals who are trained in how to write questions that are accessible to students and reflect the content of the standards. The test questions are then reviewed by Tennessee teachers and rewritten to ensure their feedback is incorporated.

How do we know that questions are appropriate?

Tennessee educators review the questions for instructional content and for bias and sensitivity to ensure that they don't disadvantage any group of students. For the first year of TNReady, we will use test questions that have already been field tested in other states, so that we can be confident of the quality of questions. Each test question will be reviewed by no fewer than six Tennessee teachers and will be revised based on their feedback.

How are Tennessee educators selected to participate in reviewing test questions?

We chose Tennessee educators to serve as item reviewers through a highly selective competitive process. Item reviewers were chosen from every region of the state, representing 78 districts.

How are Tennessee educators involved in scoring TNReady?

Tennessee teachers will determine proficiency levels (such as basic, proficient, and advanced) for each grade level and subject area. Educators will be selected for this role through a highly selective competitive process. This mirrors the process used to determine proficiency levels on TCAP. Additionally, Tennessee teachers will participate in a process, called rangefinding, in which educators score student essays and develop training materials that the vendor will use to train and evaluate their scorers.

What resources will teachers and schools have to prepare for TNReady?

- This spring teachers will have access to examples of the types of questions that will be asked, and next school year full practice tests will be available.
- The department will hire top Tennessee teachers to teach their peers about the new assessment during summer training.
- Teachers will have the opportunity to provide feedback on the practice tools during the spring and summer.

What resources will be available to the parents and the public?

Parents and the public will be able to review and practice with a sample set of test questions online.

Tab 2

Module Two:
Accessibility and
Accommodation Features

On Tab, write “Accessibility”

Accessibility and Accommodations Note Tracker

Topic	Key Points	Other Notes/Plans
Allowable Conditions for All (p. 5)		
Accessibility Features for All (p. 6-8)		
Accommodations for Identified Students (p. 8-12)		
Impact of this information and key actions I need to take at my school:		

TNREADY

ENSURING ACCESS FOR ALL:

GUIDELINES FOR ALLOWABLE TEST ADMINISTRATION CONDITIONS, ACCESSIBILITY FEATURES, AND ACCOMMODATIONS

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Introduction

TNReady is the statewide assessment for English language arts (ELA) and mathematics. TNReady includes grade level tests for students enrolled in Grades 3-8 and End of Course tests for students enrolled in courses aligned to the first three English courses required for high school graduation and the first three mathematics credits required for high school graduation. TNReady tests are available in two modes: computer-based tests (CBT) and paper-based testing (PBT). The two modes, CBT and PBT, will produce comparable student results.

Increased opportunities for students exist when using a computer-based test design such as TNReady. Some students may require individualized access through accessibility features and/or accommodations. This document provides guidance on the use of accessibility features and accommodations for students with disabilities and English Learners.

The goals of this document are to:

- Identify avenues for all students to participate in the statewide assessment program.
- Provide detailed information regarding the valid and appropriate use of accessibility features and accommodations for students participating in the statewide assessment program.

This document does not provide guidance for the alternate assessment available for students with significant cognitive disabilities, the National Center and State Collaborative (NCSC). For guidance or information, please visit the Special Education Assessment page on the TNDOE website.

Intended Audience and Recommended Use

The TNReady Accessibility Guidelines are intended for school-level personnel and decision-making teams including parents, students, classroom teachers, English as a Second Language (ESL) specialists, special education teachers, and related service personnel to use in selecting and administering the accessibility features and/or accommodations for those students who need them for equitable access. These are also intended for assessment staff and administrators who oversee the decisions that are made in instruction and assessment.

The Accessibility Guidelines apply to all students. They emphasize an individualized approach to the implementation of assessment practices for those students who have diverse needs and participate in large-scale content assessments. This document focuses on the Allowable Test Administration Conditions, Accessibility Features, and Accommodations for the TNReady content assessments of English language arts and mathematics (math). At the same time, it supports important instructional decisions about accessibility and accommodations for students who participate in the TNReady assessments. It recognizes the critical connection between accessibility and accommodations in instruction and accessibility and accommodations during assessment.

TNReady Assessment Design

TNReady is a standardized test. Correct administration requires the use of this document as well as the corresponding Test Administration Manual. For the secure summative assessments, a school team can only make available to students the allowable testing procedures, accessibility features, and accommodations that are included in this guide or through the state approved accommodation request process.

Student Participation in TNReady

Federal laws governing student participation in statewide assessments include the Elementary and Secondary Education Act (ESEA) (reauthorized as the No Child Left Behind Action of 2001-NCLB), the Individuals with Disabilities Education Improvement Act of 2004 (IDEA), and Section 504 of the Rehabilitation Act of 1973 (reauthorized in 2008). Both Federal and State laws require that all students enrolled in public schools participate in assessments designed to provide accountability for the effectiveness of instruction in schools. To prepare for the assessments, every student should be engaged in an instructional program based on Tennessee's Academic Standards.

All students, including students with disabilities, English Learners, and English Learners with disabilities, are to be held to the same expectations for participation and performance on state assessments. Specifically, all students enrolled in grades 3-8 and the applicable high school courses are required to participate in the TNReady mathematics assessment except:

- Students who will be assessed using the alternate assessment, NCSC.
- Students who meet medical exemption guidelines.

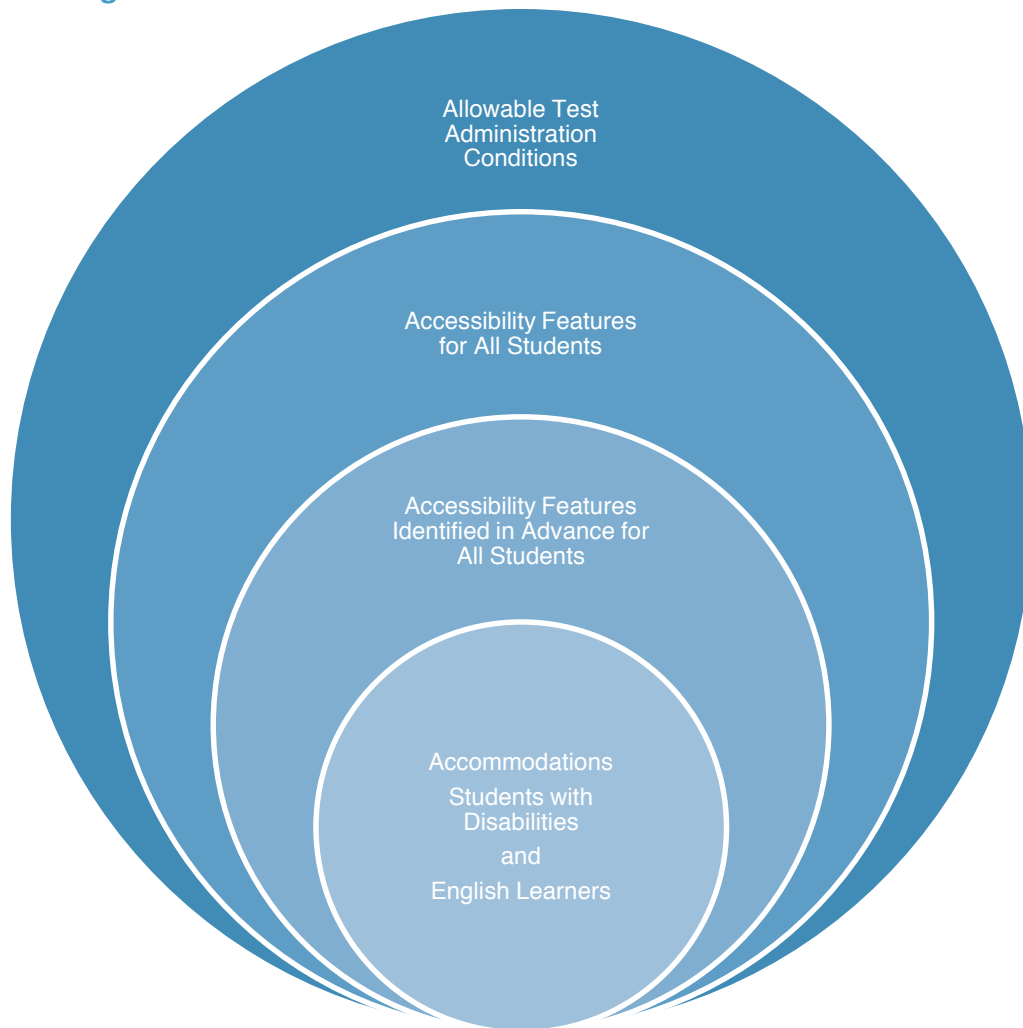
All students enrolled in grades 3-8 and the applicable high school courses are required to participate in the TNReady English language arts assessment except:

- Students who will be assessed using the alternate assessment, NCSC.
- Students who meet medical exemption guidelines.
- English Learners (EL) who are enrolled for the first year in a U.S. school.

The model that serves as the basis for the TNReady Accessibility Guidelines is shown in Figure 1. This figure portrays several aspects of the TNReady assessment features - allowable testing procedures, accessibility features (including accessibility features identified in advance) which are available to all students, and accommodations available as needed per documented IEP, 504 Plan or due to English language proficiency status. Allowable testing procedures and accessibility features are available to all students, including those receiving accessibility features identified in advance and those receiving accommodations. Accessibility features identified in advance are available only to students for whom an adult or team has indicated the need for these features. Accommodations are available only to those students with documen-

tation of need through a formal plan (i.e., IEP) or status as an English Learner. The use of these supports all yield valid scores that count as participation in statewide assessments when used in a manner consistent with the guidelines.

Figure 1: Increasing Access for All



Section 1: Allowable Test Administration Conditions

Allowable test administration conditions are specific testing situations and conditions that may be offered to any student in order to provide a comfortable and distraction-free testing environment. Some examples include:

- Testing in small groups, testing in an individual setting, testing in a separate location or in a study carrel.
- Preferential seating in a specific location within the testing room or seated at special furniture.
- Having the test administered by a familiar test administrator.
- Using a special pencil or pencil grip.
- Using devices that allow the student to see the test (i.e., glasses, contacts, magnification, special lighting).
- Using devices that allow the student to hear test directions (i.e., hearing aids, amplification).
- Signing the scripted directions.

- Reading the test quietly to himself/herself as long as other students are not disrupted.
- Using blank scratch or graph paper provided by the test administrator; graphic organizers are not allowed for use.

Please refer to the TNReady Test Administration Manual for additional allowable test administration conditions.

Section 2: Accessibility Features and Accessibility Features Identified in Advance

Accessibility features are built into the computer testing platform. These features are available to all students and can be accessed any time during the assessment. Students must practice using these features.

Table 1: Accessibility Features for All Students

Accessibility Features for All Students	Description
Help	View on-screen instructions and video tutorial about how to respond to each item type.
Highlighter	Highlight text in a passage or item.
Line Reader	Allows student to track the line he or she is reading. Students are able to focus their attention on a specific piece of text at a time.
Mark (Flag) for Review	Mark an item for review so that it can be easily found later.
Notes/Comments	Allows student to open an on-screen notepad and take notes or make comments. In ELA, notes are available globally and available throughout the session. In math, comments are attached to a specific test item and available throughout the session.
Answer Eliminator	Cross out answer options for multiple-choice and multi-select items.
Text-to-Speech for Internal Test Instructions	Students are read internal test instructions via computer platform.
Writing Tools	Editing tools (cut, copy, and paste) and basic text formatting tools (bold, underline, and italic) as well as spell check for extended response items. Spell check gives options for the correctly spelled word.
Zoom In/Zoom Out	Enlarge the font and images in the test. Undo zoom in and return the font and images in the test to the original size. The zoom levels are 0.65x, 0.8x, 1.0x, 1.25x, 1.6x, and 2.0x.
Pop Up Glossary or Dictionary/Thesaurus	The student is able to view definitions of pre-selected, underlined words. The definition appears in a pop-up text box.
Audio Amplification	Student can adjust the volume of the audio during the test session.

Accessibility Features Identified in Advance

A small number of students will require additional accessibility features to meet their individual needs. These accessibility features will be selected ahead of time based on the individual needs and preferences of the student.

It is recommended that a consistent process be used to determine these supports for individual students and to subsequently teach the student how to access and use the features. Accessibility features identified in advance must be entered in to the student's personal profile on the MIST platform.

Who Makes Decisions about Accessibility Features Identified in Advance?

The decisions are made by all educators familiar with the student's characteristics and needs, as well as those supports that the student has been using during instruction and for other assessments. These supports are needed in the student's everyday life. For example, the student who requires a color overlay when reading text may also require the Color Contrast Accessibility Feature Identified in Advance. Therefore, it is critical for all educators making these decisions to be trained on the process and range of supports available. Student input regarding these decisions, especially for older students, is strongly recommended. Appendix D may be used to collect student input to this decision.

Table 2: Accessibility Features Identified in Advance

Accessibility Features for All Students Identified In Advance	Description	Recommendations for Use
Answer Masking	Answer options are masked. The student will uncover answer options when ready.	This feature is recommended for students who have attention difficulties. It may also be needed by students with print disabilities or visual impairments. Students may need to mask content not of immediate need which may be distracting.
Color Contrast (Background/Font Color)	Enables students to adjust screen background or font color, based on student needs or preferences. Provides an alternate onscreen background and/or font color when enabled. Current color options are: Black on Cream Black on Light Blue Black on Light Magenta White on Black Light Blue on Dark Blue Gray on Green (Low Contrast).	Students with attention difficulties may need this support for viewing test content. It also may be needed by some students with visual impairments or other print disabilities. Choice of colors should be informed by evidence that color selections meet the student's needs.

Accessibility Features for All Students Identified In Advance	Description	Recommendations for Use
Text-to-Speech for Math	Text is read aloud to students using embedded text-to-speech software. Students must be tested in a separate setting if unable to wear headphones.	This feature is not recommended for students who are currently reading on or just below grade level. If not used regularly during instruction, this support is likely to be confusing and may impede the performance on assessment. The use support should only be reserved for the struggling readers who need assistance accessing text. This may be used with beginning and intermediate ELs.
Human Signer for Math	A human signer may be provided for a student with a hearing impairment or deafness.	Students who require an interpreter for daily instruction.
Magnification	Allows student to use a “magnification bubble” tool to increase the size to an even larger level not provided by the zoom tool.	Students with a visual impairment who require magnification above that which is provided via zoom tool. This feature allows a student to “hover” a magnification glass over text to enlarge the image.
Increased Font Size	The font size can be increased to a predetermined size as needed. The zoom and magnification features are available for use in conjunction with increased font size.	Students with a visual impairment who require a larger font size in addition to zoom and/or magnification of text.

Section 3: Accommodations

Accommodations are available only to students with a disability served under an Individual Education Program (IEP), 504 Plan, or students classified as English Learners, and only when the student requires the accommodation(s) to participate in the assessment meaningfully and appropriately.

Please note: one exception to the IEP or 504 requirement is for students who have had a physical injury (e.g., broken hand or arm) that impairs their ability to use a computer. These students may use the speech-to-text or the scribe accommodation, as noted in this section.

Testing accommodations provide more equitable access during assessment but do not alter the validity of the assessment, score interpretation, reliability, or security of the assessment and do not substantially change the instructional level, the content, or the performance criteria. Accommodations can be changes in presentation, response, setting, and

timing/scheduling of educational activities. For a student with disabilities, accommodations are intended to reduce or even eliminate the impact of the student's disability on their access and participation in the assessment. For an English Learner or a student in the first or second year of Transition (T1/T2) from English Learner status, accommodations are intended to allow the student the opportunity to demonstrate content knowledge even though the student may not be functioning at grade level in English.

Testing accommodations may not violate the construct of a test item, provide verbal or other clues, suggestions that hint at or give away the correct response to the student. Therefore, it is not permissible to simplify, paraphrase, explain, or eliminate any test item, writing prompt, or answer option.

While there are many accommodations used within daily instruction, accommodations available to students while testing on TNReady are generally limited to those listed in the later sections of this document. If an accommodation is not listed and is needed to ensure access, please follow the Unique Accommodation Request process.

Accommodations must be indicated in the student's MIST profile and the school staff must ensure the materials and/or the setting are available for the assessment.

Who Makes Decisions about Accommodations?

IEP teams and/or educators make decisions about accommodations. These teams (or educators for 504 and English Learners) provide evidence of the need for accommodations and ensure they are noted on the IEP or 504 plan. Therefore, no accommodation may be put in place for a TNReady assessment that does not have data to support its use.

Selecting Appropriate Testing Accommodations for Students Who Need Them

Research indicates that more accommodations are not necessarily better. Providing students with accommodations that are not truly needed may have a negative effect on performance. There should be a direct connection between a student's disability, special education area of deficit, or English proficiency and the accommodation(s) provided to the student during educational activities, including assessment. Make accommodation decisions based on individual needs to reduce the effect of the disability or limited English proficiency. Selected accommodations should be provided routinely for classroom instruction and classroom assessment during the school year in order to be used for standardized assessments.

Administering TNReady with Testing Accommodations

Prior to the test, test administrators must know what accommodations each student will be using and how to administer them properly. Testing accommodations provided for one student may not impede or impact other students in the test-

ing room. It is the responsibility of the Test Administrator to see that each student who qualifies for testing accommodations receives them with efficacy while also ensuring that other students who do not receive accommodations are not affected. Accommodations must be properly recorded as directed in the TNReady Test Administration Manual.

Accommodations for Students with an Injury

Students with an injury, such as a broken hand or arm, that would make it difficult to participate in TNReady may use, as appropriate, any of the following accommodations. There are no specific CBT tools to support these accommodations.

Accommodations for Students with an Injury	Description
Adult Transcription	An adult marks selected response items based on student answers provided orally or using gestures. An adult transfers student responses to the MIST testing platform.
Assistive Technology	Use of assistive technology for the writing response and/or other open response items. Internet access, grammar check, and word prediction functions must be turned off. An adult must transfer the student's responses exactly as written to the MIST testing platform. Any print copy must be shredded. Any electronic copy must be deleted. This accommodation also requires Adult Transcription.

Accommodations for Students with Disabilities

Students with disabilities may use any of the accessibility features, accessibility features identified in advance, and any of the following accommodations, as designated in their IEP or 504 Plan.

Accommodations for Students with Disabilities	Description
Adult Transcription	An adult marks selected response items based on student answers provided orally or using gestures. An adult transfers student responses to the MIST testing platform.
Assistive Technology	Use of assistive technology for the writing response and/or other open response items. Internet access, grammar check, and word prediction functions must be turned off. An adult must transfer the student's responses exactly as written to the MIST testing platform. Any print copy must be shredded. Any electronic copy must be deleted. This accommodation also requires Adult Transcription. Students may use a range of assistive technologies on the assessment, including devices that are compatible with MIST and those that are used externally. Assistive technology options include, but are not limited to, adapted keyboards, large keyboards, MouseKeys, FilterKeys, adapted mouse, touch screen, Dynavox, and head wand.

Accommodations for Students with Disabilities	Description
Braille Test Booklet	Provide a paper Braille test booklet. This accommodation requires Adult Transcription on the MIST platform.
Extended Time	Not to exceed double time. If a student has a need to exceed double time, please submit a Unique Accommodation Request.
Paper Test	A PDF may be available through the Unique Accommodation Request process for students who are unable to participate in a computer-based assessment due to his or her disability. This accommodation requires Adult Transcription on the MIST platform.
Text-to-Speech for English Language Arts	A student receives an audio representation of the ELA/Literacy assessment via text-to-speech or a human signer. This accommodation is intended to provide access to text on TNReady ELA assessments to students with print related disabilities who would otherwise be unable to participate. Access is defined as a student who is able to decode and comprehend text. For additional guidance, please see Appendix A
Human Signer for English Language Arts	A student who requires a human signer for English Language Arts content may use this accommodation during the TNReady English Language Arts assessment. For additional guidance, please see Appendix A.
Visual Representations for Math	This accommodation may be used in place of scratch paper for students who typically use an abacus or manipulative such as cubes, tiles, rods, blocks, etc. This accommodation may only be used on the non-calculator sections of the assessment.
Rest/Breaks	This allows for the assessment to be paused at any time and restarted. Each session must be completed within one test day. Once paused, a student may not be able to view previously completed work if the break exceeds 20 minutes.
Speech-to-Text	Voice recognition software allows students to use their voices as input devices to the computer to dictate responses. Students may use their own assistive technology devices.
Word Prediction	This accommodation provides a bank of frequently used words on-screen for the student to choose.
Unique Accommodation Request	This request process is provided to review any accommodation not listed for a student with an identified need. The accommodation may not invalidate or modify any intended test construct.

Accommodations for English Learners and Transition Year 1 and Year 2 Students

Students who are not proficient in English, as determined by ACCESS for ELLs, may use, as appropriate, any of the acces-

sibility features and any of the following accommodations. This includes English Learners (ELs) and students in the Transition Year 1 and Transition Year 2. Students whose parents have waived services are eligible to receive accommodations for ELs. As ELs gain in English proficiency, their need for support may decrease. The language proficiency of the student should be taken into consideration when determining appropriate EL accommodations.

Accommodations for EL and T1/T2 Students	Description
Extended Time	Not to exceed double time.
Word-to-Word Dictionary	The student may use an approved bilingual, word-to-word dictionary. Dictionaries that include definitions, phrases, sentences, or pictures are not allowed. The student should be familiar with the dictionary they will use during testing. Students should be given ample time to complete the test using the accommodation. If no hard copy word-to-word dictionary can be found for a specific language, contact tned.assessment@tn.gov
Rest/Breaks	This allows for the assessment to be paused at any time and re-started. Each session must be completed within one test day. Once paused, a student may not be able to view previously completed work if the break exceeds 20 minutes.

Section 4: The Decision-making Process for Selecting Accessibility Features and Accommodations

Selecting Accessibility Features and Accommodations for Individual Students

When selecting accessibility features or accommodations, educators should consider the following:

- What learning challenges is the student experiencing?
Observe the student's classroom performance.
- Does the feature or accommodation address the challenge?
Try various supports in different instruction and assessment settings and evaluate whether they address the student's needs; if not, revise the support(s) accordingly.
- Is the accessibility feature or accommodation allowed for TNReady?
Develop a plan or amend the IEP/504 Plan in collaboration with an EL specialist, general education team, special education teacher, or school level decision-making team, while reviewing the available supports. Remember that the different assessments and parts assess different content and additional support may not be necessary for each part.

Accessibility features, including those identified in advance, and accommodations are intended to provide students with the tools and supports they need in order to participate fairly and equitably in the TNReady assessments. In making decisions regarding accessibility features and accommodations, educators should remember that:

- Students should only receive the supports that they use during daily instruction (with rare exceptions) and that they need in order to participate meaningfully in the assessment;
- Selection of supports should not be based on a “more-is-better” approach in an attempt to provide every possible advantage on the test, nor should students be provided with unnecessary accommodations;
- Accessibility features and accommodations should not be broadly assigned across all TNReady assessments and parts, but considered and discussed separately for each assessment and assessment part;
- Accommodations should not be assigned based on the type of disability or English language proficiency, but rather on the individual needs of the student based on data; and
- Accommodations should not be used to compensate for a student’s lack of knowledge and/or skills, or because of a lack of appropriate instruction.

When possible, educators should choose supports that are consistent with the student’s current needs, based on the experience of educators who currently work with the student, and consistent with those already used for routine instruction and local assessments. In any case, it is critical that students have the opportunity to become familiar with the accessibility feature or accommodation, and practice using it prior to the administration of the TNReady assessment. For this reason, it is necessary to decide on supports well in advance of the assessment.

Appendix A: Text-to-Speech Guidance : IEP or 504 Plan Decision-making Tool

Directions: This tool has been developed to assist IEP teams and 504 plan coordinators in identifying students who may need the accommodation of text-to-speech in order to access the English language arts assessment. Inappropriate use of an accommodation may result in the student's assessment being invalidated and the score will not be included in summary calculations. The student will be considered a participant, but the test is not scored and all reports will indicate the score was nullified.

Guidelines for IEP Team or 504 Plan Considerations	Additional Guidance
The student has an Individual Education Plan (IEP) or 504 Plan	Student has an approved IEP or current 504 plan
<p>In making decisions on whether to provide the student with this accommodation, IEP teams and 504 plan coordinators are instructed to consider whether the student has:</p> <ul style="list-style-type: none"> • Blindness or a visual impairment and has not yet learned (or is unable to use) braille; Or • A disability that severely limits or prevents him/her from accessing text, even after varied and repeated attempts to teach the student to do so (e.g., student is unable to decode printed text); Or • Deafness or a hearing impairment and is severely limited or prevented from decoding text due to a documented history of early and prolonged language deprivation. 	<p>For the text-to-speech or human signer accommodation, the IEP team or 504 plan coordinator must determine whether the student has a disability that severely limits or prevents him or her from decoding text.</p> <p>For the text-to-speech or human signer accommodation, the IEP team or 504 plan coordinator must determine whether the student has a disability that severely limits or prevents him or her from accessing text.</p> <p>The IEP team or 504 plan must document objective evidence from a variety of sources (including state assessment, district assessment, and one or more locally-administered diagnostic assessments or other evaluations) that indicate that the student's ability to decode text is severely limited or prevented, or that the student is blind or visually impaired and has not yet learned (or is unable to use) braille.</p>
<p>Before listing the accommodation, provide evidence that the student is blind or visually impaired and that:</p> <ul style="list-style-type: none"> • The student has access to printed text during routine instruction through a reader or other spoken-text audio format, or interpreter; Or • The student's inability to access text or read braille is documented in evaluation summaries from locally-administered diagnostic assessments; Or • The student receives ongoing, intensive intervention and/or instruction in the foundational reading skills to continue to attain the important college and career-ready skill of independent reading. 	<p>List the data and evaluation sources:</p> <ol style="list-style-type: none"> 1. Name of diagnostic evaluation or educational assessment and scores; 2. A summary of the results; 3. Additional assessments and results; 4. The instructional intervention and supports specifically related to reading that are currently provided to the student: <ul style="list-style-type: none"> • Intensive reading interventions have been provided for ____ years. • List the specific school years and frequency _____ • Describe and list the specific reading interventions provided to the student.

Appendix B: Unique Accommodation Request Process

Directions: If an English Learner or a student with a disability requires an accommodation that is not listed in the Accessibility and Accommodation guidance document and that does not change the construct being measured by the test, the school may request approval for use of the accommodation using this request form. If approved, the accommodation must be listed in the Individual Education Plan (IEP) or 504 plan for a student with a disability or the English Learner plan, if applicable.

To request approval for a unique accommodation, this form must be completed and uploaded to EdTools by the principal or district primary testing coordinator, or designee, at least six weeks prior to testing to ensure a timely state response is received. Do not email this form. Once the form is uploaded, email tned.assessment@tn.gov. A copy of this form must be kept in the student's file and, if appropriate, retained at the district office.

Contact Information	
District/School Name:	District/School Number:
Name of Principal/Designee or District/LEA Assessment Coordinator:	Date:
Email:	Contact Number:
Student Information	
Student Name:	State ID Number:
Grade:	DOB:
Indicate Type of Plan: IEP 504 Plan English Learner	
TNReady Test Administration	
For which TNReady Assessment are you seeking approval to use the unique accommodation?	
Provide a brief description of the accommodation for which you are requesting approval:	
Describe evidence that supports the need for this accommodation, including how it is used by the student in the classroom and on other assessments:	

Appendix C: Decision-making Tool for Paper Based Testing

The following decision guidance may be used to inform teams when the team may request a Paper Based Testing option. Student: _____ District/School: _____	
Does the student have one of the following conditions:	
Blindness or a Visual Impairment	Medical Condition or an Orthopedic Impairment
If Yes, see corresponding columns below. If No, stop--student is not eligible to receive a paper based test due to his or her disability.	
Yes-the student is blind or significantly visually impaired	Yes-the student has a medical condition or orthopedic impairment which precludes access to the online platform
<p>Please answer the following questions:</p> <p>Step One: Zoom</p> <ul style="list-style-type: none"> Was the student provided multiple opportunities during multiple sessions to use the zoom tool? Yes - Did the tool provide adequate access? If yes, stop. If no, move to step two. No - Stop. Student must be provided the least restrictive option first. <p>Step Two: Increased Font Size, in addition to Zoom</p> <ul style="list-style-type: none"> If the zoom tool did not provide adequate access, was the student provided multiple opportunities during multiple sessions to use increased font size in addition to the zoom tool? Yes - What was the outcome of this opportunity? No - Stop. Student must be provided the least restrictive option first. <p>Step Three: Magnification Tool, in addition to Zoom and Increased Font Size</p> <ul style="list-style-type: none"> If increased font size in addition to the zoom tool did not provide adequate access, was the student provided multiple opportunities during multiple sessions to use the magnification bubble in conjunction with zoom and increased font size? Yes - What was the outcome of this opportunity? If unsuccessful, submit a unique accommodation request with all supporting evidence to request a PDF. No - Stop. Student must be provided the least restrictive option first. 	<p>Please answer the following questions:</p> <p>Step One: Doctor Statement</p> <ul style="list-style-type: none"> Does the student have a recent doctor's statement or IEP or 504 plan evaluation to verify the student's disability? Yes - Proceed to the next question. No - A current doctor's statement or IEP or 504 plan evaluation is required before this condition will be considered. <p>Step Two: Other attempted accommodations</p> <ul style="list-style-type: none"> Can the student access the online assessment if provided multiple breaks, appropriate lighting, special time of day, and/or assistive technology? Yes - Stop. Student can be accommodated without the need for a PDF. No - List other accommodations attempted and outcomes of each. If listed accommodations do not provide access to the online testing platform, proceed to Step Three. <p>Step Three: Other devices</p> <ul style="list-style-type: none"> Is the student able to use a tablet or a Chromebook? Yes - Stop. Student is able to access TNReady via tablet or Chrome book. No - If student is unable to access TNReady via alternate devices and steps one and two have also proven ineffective, submit a unique accommodation request form with all supporting evidence to request a PDF.

Appendix D: Accommodations from the Student’s Perspective

Use this questionnaire to collect information about needed accommodations from the student’s perspective. The questions can be completed independently or as part of an interview process. Whatever method is used, however, be certain that the student understands the concept of an accommodation, providing examples as necessary. Also, provide a list of possible accommodations to give the student a good understanding of the range of accommodations that may be available.

1. Think about all the classes you are taking now. Which is your best class?

2. Explain what you do well in this class.

The things you said you can do well above are your strengths. For example, you may have mentioned reading, writing, listening, working in groups, working alone, drawing, or doing your homework as some things you can do well. If you said you really like the subject, have a good memory, and work hard in class, these are also examples of your strengths.

3. Now ask yourself, “What class is hardest?”

4. What’s the hardest part of this class for you?

The things you said were hardest are areas you need to work on during the school year. For example, you may have listed paying attention in class, reading a book, taking tests, listening, staying in your seat, remembering new information, doing homework, or doing work in groups.

These are all things in which an accommodation may be helpful for you.

5. In the list that follows, write down all of the classes you are taking now. Then look at a list of accommodations. Next to each class, write down what accommodation(s) you think might be helpful for you.

Classes	Accommodations
1.	<hr/>
2.	<hr/>
3.	<hr/>
4.	<hr/>
5.	<hr/>

Appendix E: Sample Parent Notification Letter of the Statewide Accommodation Change

Dear Parent/Guardian,

After the 2014-15 school year, Tennessee will be replacing the TCAP Achievement and the TCAP End of Course with the Tennessee Ready (TNReady) for Language Arts and Mathematics. This change in testing may impact your child's individualized education plan (IEP). Your child's current IEP may need to be updated to reflect this new assessment and ensure that he/she is receiving the appropriate accommodations on the new assessment. The purpose of this letter is to inform you of the most recent allowable test accommodations and any changes needed to your child's accommodations in the IEP.

Many accommodations that were previously included on the IEP may already be incorporated into the new TNReady Test or may be available to all students. To help ensure that we are providing accommodations appropriate for your child on the TNReady Test, it is necessary to amend your child's IEP.

The IDEA regulation at 34 C.F.R. § 300.160(b), regarding participation in assessments, provides that states must ensure that all children with disabilities are included in all general state and district-wide assessment programs with appropriate accommodations and alternate assessments, if necessary, as indicated in their respective IEPs. Additionally, Section 614(d)(3)(D) of H.R. 1350, the revised Individuals with Disabilities Education Act, the "IDEA," provides as follows: In making changes to a child's IEP after the annual IEP meeting for a school year, the parent of a child with a disability and the public agency (school district) may agree not to convene an IEP meeting for the purposes of making those changes, and instead may develop a written document to amend or modify the child's current IEP. Such changes may be made by amending the IEP rather than by redrafting the entire IEP. Upon request, a parent must be provided with a revised copy of the IEP with the amendments incorporated.

The Tennessee Department of Education has developed guidelines for the provision of appropriate accommodations. The guidelines were communicated to local education agencies and IEP teams were instructed to identify only the accommodations that do not invalidate test scores.

If you have any questions or wish to discuss these changes rather than amend the IEP through use of the statewide process, please contact _____ at _____. A list of the changes due to new accessibility and accommodation guidance are attached to this letter.

Tab 3

Module Three:

English Language Arts

On Tab, write “ELA”

Key Question:

How do teachers help build an understanding of the interconnectedness between reading and writing and its impact on instruction?

Teacher Training Top Take-Aways (English Language Arts)

These are the areas where teachers are concentrating their learning efforts during their summer training. These will also be the most important components of the redelivery and support approach at your building and will constitute the major “look for” areas in your classroom observations during the 2015-16 school year:

- **Reading and writing are a connective process** and should not be isolated from one another in instruction.
- Writing should happen everyday in **big ways and small ways**.
- Students’ abilities to **read complex text and respond in writing** need to be scaffolded over time. Students need to be engaged in increasingly difficult tasks to build stamina and perseverance.
- There should be a continued focus on the instructional shift of reading, writing, and speaking **grounded in evidence from text**, both literary and informational?

“High quality culminating writing tasks and reading assignments will engage students, build stamina, and predict performance.”

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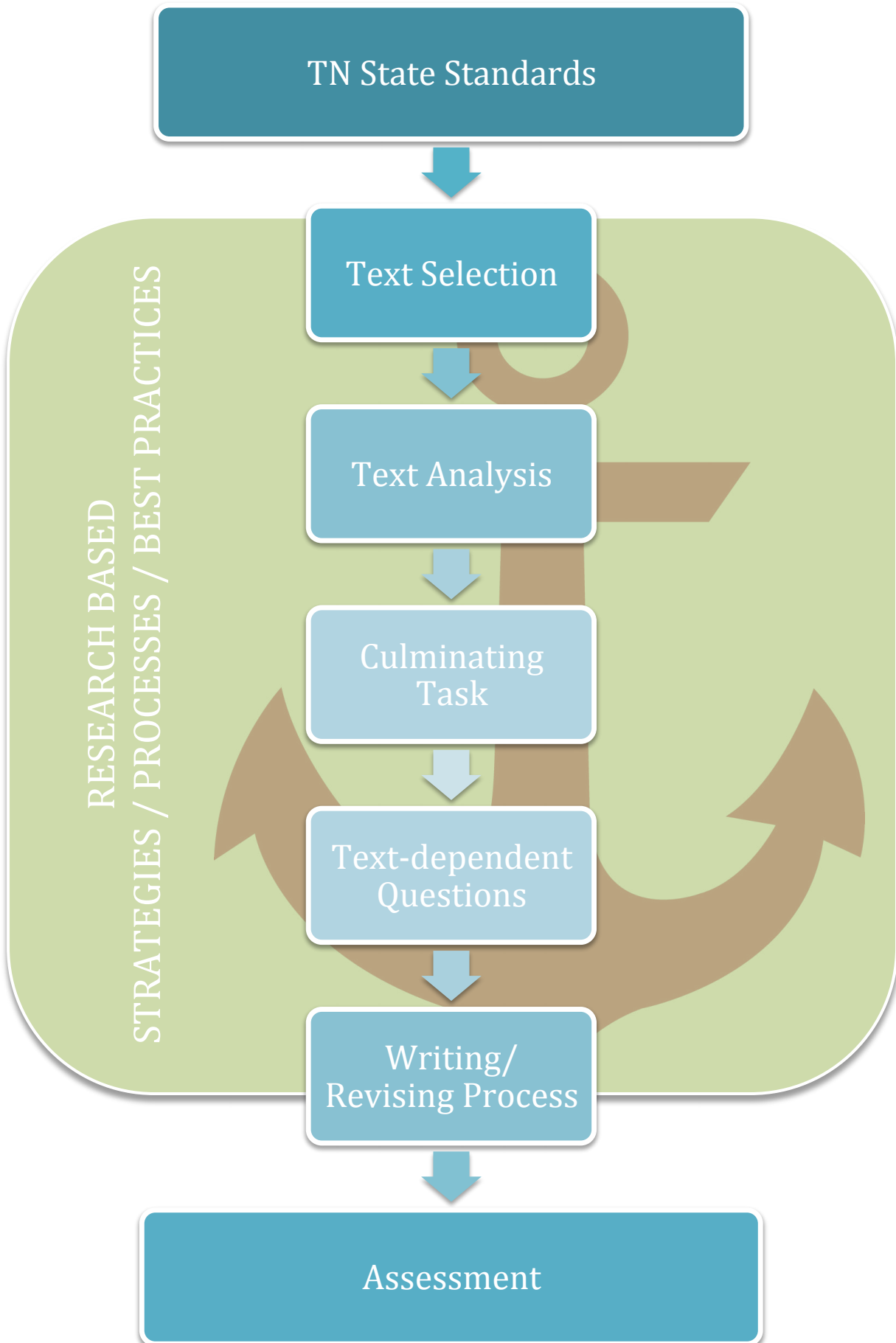
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What ANCHORS Student Success?



A Report to Carnegie Corporation of New York

READINGNEXT

A VISION FOR ACTION AND RESEARCH IN
MIDDLE AND HIGH SCHOOL LITERACY



ALLIANCE FOR
EXCELLENT EDUCATION

Acknowledgments

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The Alliance is also particularly grateful to Andrés Henríquez at Carnegie Corporation of New York for his review of and feedback on this work, and for embracing and advocating for the eight million struggling intermediate and adolescent readers in our country. His assistant, Sara Wolpert, provided valuable help with the logistics around this effort.

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FOREWORD

During the last decade, this country's attention has been focused on improving reading education. This focus led to the generation of reports, reviews, revised curricula, redesigned professional development, and the provisions of the Reading First initiative. The recent interest in reading, however, directed attention almost entirely to *early* literacy—that is, to reading in the primary grades, defined as word recognition.

Somewhat neglected in those various efforts was attention to the core of reading: comprehension, learning while reading, reading in the content areas, and reading in the service of secondary or higher education, of employability, of citizenship. It is clear that getting third graders to read at grade level is an important and challenging task, and one that needs ongoing attention from researchers, teacher educators, teachers, and parents. But many excellent third-grade readers will falter or fail in later-grade academic tasks if the teaching of reading is neglected in the middle and secondary grades.

In 1950, when opportunities to achieve economic stability and a middle-class standard of living were open to those without a high school diploma, students unable to convert their third-grade reading skills into literacy levels useful for comprehending and learning from complex, content-rich materials could drop out of high school and still hope to achieve a reasonably comfortable and successful lifestyle. In 2004, however, there are few opportunities for the high school dropout to achieve a comparable way of life; jobs, welfare, and social safety nets will no longer be available as they once were.

Educators must thus figure out how to ensure that every student gets beyond the basic literacy skills of the early elementary grades, to the more challenging and more rewarding literacy of the middle and secondary school years. Inevitably, this will require, for many of those students, teaching them new literacy skills: how to read purposefully, select materials that are of interest, learn from those materials, figure out the meanings of unfamiliar words, integrate new information with information previously known, resolve conflicting content in different texts, differentiate fact from opinion, and recognize the perspective of the writer—in short, they must be taught how to *comprehend*.

Ensuring adequate ongoing literacy development for all students in the middle and high school years is a more challenging task than ensuring excellent reading education in the primary grades, for two reasons: first, secondary school literacy skills are more complex, more embedded in subject matters,

and more multiply determined; second, adolescents are not as universally motivated to read better or as interested in school-based reading as kindergartners. This is, therefore, not a problem with a simple solution. But we have research-based as well as practice-based knowledge to bring to it. *Reading Next: A Vision for Action and Research in Middle and High School Literacy* charts a route for using that knowledge optimally, while at the same time adding to it. It is a call to researchers in this area to exchange a bit of their self-determination in the service of producing more interpretable findings, and a call to funders interested in educational reform to forfeit a bit of their programmatic autonomy to increase the returns on their investments. If both groups heed the call, adolescent readers and the teachers dedicated to their success will benefit.

Catherine E. Snow

Henry Lee Shattuck Professor of Education

Harvard Graduate School of Education

Cambridge, Massachusetts

July 18, 2004

EXECUTIVE SUMMARY

The Issue

American youth need strong literacy skills to succeed in school and in life. Students who do not acquire these skills find themselves at a serious disadvantage in social settings, as civil participants, and in the working world. Yet approximately eight million young people between fourth and twelfth grade struggle to read at grade level. Some 70 percent of older readers require some form of remediation. Very few of these older struggling readers need help to read the words on a page; their most common problem is that they are not able to comprehend what they read. Obviously, the challenge is not a small one.

Meeting the needs of struggling adolescent readers and writers is not simply an altruistic goal. The emotional, social, and public health costs of academic failure have been well documented, and the consequences of the national literacy crisis are too serious and far-reaching for us to ignore. Meeting these needs will require expanding the discussion of reading instruction from Reading First—acquiring grade-level reading skills by third grade—to Reading Next—acquiring the reading skills that can serve youth for a lifetime.

Fortunately, a survey of the literacy field shows that educators now have a powerful array of tools at their disposal. We even know with a fair degree of certitude which tools work well for which type of struggling reader. However, we do not yet possess an overall strategy for directing and coordinating remedial tools for the maximum benefit to students at risk of academic failure, nor do we know enough about how current programs and approaches can be most effectively combined.

The Approach

To help address this problem, a panel of five nationally known and respected educational researchers met in spring 2004 with representatives of Carnegie Corporation of New York and the Alliance for Excellent Education to draw up a set of recommendations for how to meet the needs of our eight million struggling readers while simultaneously envisioning a way to propel the field forward. The resulting paper was reviewed and augmented by the Adolescent Literacy Funders Forum (ALFF) at its 2004 annual meeting. Although this report originally was targeted to the funding community, it offers information that will also prove invaluable to others, including researchers, policymakers, and educators.

The Recommendations

The Fifteen Elements of Effective Adolescent Literacy Programs

This report delineates fifteen elements aimed at improving middle and high school literacy achievement right now.

1. **Direct, explicit comprehension instruction**, which is instruction in the strategies and processes that proficient readers use to understand what they read, including summarizing, keeping track of one's own understanding, and a host of other practices
2. **Effective instructional principles embedded in content**, including language arts teachers using content-area texts and content-area teachers providing instruction and practice in reading and writing skills specific to their subject area
3. **Motivation and self-directed learning**, which includes building motivation to read and learn and providing students with the instruction and supports needed for independent learning tasks they will face after graduation
4. **Text-based collaborative learning**, which involves students interacting with one another around a variety of texts
5. **Strategic tutoring**, which provides students with intense individualized reading, writing, and content instruction as needed
6. **Diverse texts**, which are texts at a variety of difficulty levels and on a variety of topics
7. **Intensive writing**, including instruction connected to the kinds of writing tasks students will have to perform well in high school and beyond
8. **A technology component**, which includes technology as a tool for and a topic of literacy instruction
9. **Ongoing formative assessment of students**, which is informal, often daily assessment of how students are progressing under current instructional practices
10. **Extended time for literacy**, which includes approximately two to four hours of literacy instruction and practice that takes place in language arts and content-area classes
11. **Professional development** that is both long term and ongoing
12. **Ongoing summative assessment of students and programs**, which is more formal and provides data that are reported for accountability and research purposes
13. **Teacher teams**, which are interdisciplinary teams that meet regularly to discuss students and align instruction

14. **Leadership**, which can come from principals and teachers who have a solid understanding of how to teach reading and writing to the full array of students present in schools
15. **A comprehensive and coordinated literacy program**, which is interdisciplinary and interdepartmental and may even coordinate with out-of-school organizations and the local community

Since implementation of only one or two of these elements is unlikely to improve the achievement of many students, this report recommends that practitioners and program designers *flexibly try out various combinations* in search of the most effective overall program. Furthermore, any combination should include three specific elements: professional development, formative assessment, and summative assessment. No literacy program targeted at older readers is likely to cause significant improvements without these elements, because of their importance to ensuring instructional effectiveness and measuring effects. However, they should not be seen as sufficient in themselves to address the wide range of problems experienced by older struggling readers; rather, they *act as a foundation* for instructional innovations.

Balancing Purposes

This report also stresses that improving the literacy achievement of today's and tomorrow's youth requires keeping action balanced with research. The report outlines a *balanced vision* for effecting immediate change for current students and building the literacy field's knowledge base.

Stakeholders should select programs and interventions according to the inclusion or exclusion of the fifteen elements—thereby creating a *planned variation*—and *evaluate implementation using a common process* to allow for comparisons across programs. In line with this recommendation, *outcomes* and *procedures* for evaluation are detailed to promote cross-program comparisons. By collecting data according to the recommended design, public and private funders, districts, and researchers will be able to *disaggregate* students and describe the different sources of their difficulty and the differentiated effects of programs and program components. Such disaggregation will provide a rich base for experimental research.

The Relevance

We believe that if the funding, research, policymaking, and education communities embrace these recommendations, the literacy field will make significant strides toward the goal of meeting the needs of all students in our society, while also strengthening our understanding of exactly *what works, when, and for whom*. We will thereby strengthen the chances for striving readers to graduate from high school as strong, independent learners prepared to take on the multiple challenges of life in a global economy.

THE FIFTEEN KEY ELEMENTS OF EFFECTIVE ADOLESCENT LITERACY PROGRAMS

To establish a list of promising elements of effective adolescent literacy programs, the panel considered elements that had a substantial base in research and/or professional opinion. After considerable discussion, they determined a list of fifteen critical components (see Table 1). Literature supporting these elements is cited in Appendix A.

In an ideal world, schools would be able to implement all fifteen elements, but the list may also be used to construct a unique blend of elements suited to the needs of the students they serve. This report treats each element as a distinct entity, but it is important to recognize that the elements are often synergistically related, and the addition of one element can stimulate the inclusion of another. The elements should not be seen simply as isolated elements in an inventory of potential elements, but rather as a group in which elements have a dynamic and powerful interrelationship. For instance, it is difficult to implement text-based collaborative learning (Element 4) without a classroom library of diverse texts (Element 6). We expect that a mixture of these elements will generate the biggest return. It remains to be seen what that optimal mix is, and it may be different for different subpopulations of students.

THE OPTIMAL MIX

In the medical profession, treatment needs to be tailored to an individual patient’s needs; at times, more than one intervention is needed to effectively treat a patient. Similarly, educators need to test mixes of intervention elements to find the ones that work best for students with different needs.

Table 1. Key Elements in Programs Designed to Improve Adolescent Literacy Achievement in Middle and High Schools

Instructional Improvements	Infrastructure Improvements
1. Direct, explicit comprehension instruction	10. Extended time for literacy
2. Effective instructional principles embedded in content	11. Professional development
3. Motivation and self-directed learning	12. Ongoing summative assessment of students and programs
4. Text-based collaborative learning	13. Teacher teams
5. Strategic tutoring	14. Leadership
6. Diverse texts	15. A comprehensive and coordinated literacy program
7. Intensive writing	
8. A technology component	
9. Ongoing formative assessment of students	

A Report to Carnegie Corporation of New York

WRITING NEXT

**EFFECTIVE STRATEGIES TO IMPROVE
WRITING OF ADOLESCENTS IN MIDDLE
AND HIGH SCHOOLS**

By Steve Graham and Dolores Perin



ALLIANCE FOR
EXCELLENT EDUCATION

Acknowledgments

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Steve Graham

Dolores Perin

FOREWORD

Around the world, from the cave paintings in Lascaux, France, which may be 25,000 years old, to the images left behind by the lost Pueblo cultures of the American Southwest, to the ancient aboriginal art of Australia, the most common pictograph found in rock paintings is the human hand. Coupled with pictures of animals, with human forms, with a starry night sky or other images that today we can only identify as abstract, we look at these men's and women's hands, along with smaller prints that perhaps belong to children, and cannot help but be deeply moved by the urge of our ancestors to leave some permanent imprint of themselves behind.

Clearly, the instinct for human beings to express their feelings, their thoughts, and their experiences in some lasting form has been with us for a very long time. This urge eventually manifested itself in the creation of the first alphabet, which many attribute to the Phoenicians. When people also began to recognize the concept of time, their desire to express themselves became intertwined with the sense of wanting to leave behind a legacy, a message about who they were, what they had done and seen, and even what they believed in. Whether inscribed on rock, carved in cuneiform, painted in hieroglyphics, or written with the aid of the alphabet, the instinct to write down everything from mundane commercial transactions to routine daily occurrences to the most transcendent ideas—and then to have others read them, as well as to read what others have written—is not simply a way of transferring information from one person to another, one generation to the next. It is a process of learning and hence, of education.

Ariel and Will Durant were right when they said, “Education is the transmission of civilization.” Putting our current challenges into historical context, it is obvious that if today's youngsters cannot read with understanding, think about and analyze what they've read, and then write clearly and effectively about what they've learned and what they think, then they may never be able to do justice to their talents and their potential. (In that regard, the etymology of the word *education*, which is to draw out and draw forth—from oneself, for example—is certainly evocative.) Indeed, young people who do not have the ability to transform thoughts, experiences, and ideas into written words are in danger of losing touch with the joy of inquiry, the sense of intellectual curiosity, and the inestimable satisfaction of acquiring wisdom that are the touchstones of humanity. What that means for all of us is that the essential educative transmissions that have been passed along century after century, generation after generation, are in danger of fading away, or even falling silent.

In a recent report, the National Commission on Writing also addresses this concern. They say, “If students are to make knowledge their own, they must struggle with the details, wrestle with the facts, and rework raw information and dimly understood concepts into language they can communicate to someone else. In short, if students are to learn, they must write.”

It is in this connection that I am pleased to introduce *Writing Next*. As the report warns, American students today are not meeting even basic writing standards, and their teachers are often at a loss for how to help them. In an age overwhelmed by information (we are told, for example, that all available information doubles every two to three years), we should view this as a crisis, because the ability to read, comprehend, and write—in other words, to organize information into *knowledge*—can be viewed as tantamount to a survival skill. Why? Because in the decades ahead, Americans face yet another challenge: how to keep our democracy and our society from being divided not only between rich and poor, but also between those who have access to information and knowledge, and thus, to power—the power of enlightenment, the power of self-improvement and self-assertion, the power to achieve upward mobility, and the power over their own lives and their families’ ability to thrive and succeed—and those who do not.

Such an uncrossable divide will have devastating consequences for the future of America. Those who enrich themselves by learning to read with understanding and write with skill and clarity do so not only for themselves and their families, but for our nation as well. They learn in order to preserve and enhance the record of humanity, to be productive members of a larger community, to be good citizens and good ancestors to those who will follow after them. In an age of globalization, when economies sink or swim on their ability to mine and manage knowledge, as do both individual and national security, we cannot afford to let this generation of ours or indeed, any other, fall behind the learning curve. Let me bring us back to where we began: For all of us, the handprint must remain firmly and clearly on the wall.

Vartan Gregorian
President, Carnegie Corporation of New York

EXECUTIVE SUMMARY

A Writing Proficiency Crisis

Writing well is not just an option for young people—it is a necessity. Along with reading comprehension, writing skill is a predictor of academic success and a basic requirement for participation in civic life and in the global economy. Yet every year in the United States large numbers of adolescents graduate from high school unable to write at the basic levels required by colleges or employers. In addition, every school day 7,000 young people drop out of high school (Alliance for Excellent Education, 2006), many of them because they lack the basic literacy skills to meet the growing demands of the high school curriculum (Kamil, 2003; Snow & Biancarosa, 2003). Because the definition of *literacy* includes both reading and writing skills, poor writing proficiency should be recognized as an intrinsic part of this national literacy crisis.

This report offers a number of specific teaching techniques that research suggests will help 4th- to 12th-grade students in our nation's schools. The report focuses on all students, not just those who display writing difficulties, although this latter group is deservedly the focus of much attention. The premise of this report is that all students need to become proficient and flexible writers. In this report, the term *low-achieving writers* is used to refer to students whose writing skills are not adequate to meet classroom demands. Some of these low-achieving writers have been identified as having learning disabilities; others are the “silent majority” who lack writing proficiency but do not receive additional help. As will be seen in this report, some studies investigate the effects of writing instruction on groups of students across the full range of ability, from more effective to less effective writers, while others focus specifically on individuals with low writing proficiency.

Recent reports by the National Commission on Writing (2003, 2004, 2005) have helped to bring the importance of writing proficiency forward into the public consciousness. These reports provide a jumping-off point for thinking about how to improve writing instruction for all young people, with a special focus on struggling readers. *Reading Next* (Biancarosa & Snow, 2004), commissioned by Carnegie Corporation of New York, used up-to-date research to highlight a number of key elements seen as essential to improving reading instruction for adolescents (defined as grades 4–12). *Writing Next* sets out to provide guidance for improving writing instruction for adolescents, a topic that has previously not received enough attention from researchers or educators.

While *Reading Next* presented general methods and interventions that several of America's most respected adolescent literacy experts found to be useful for improving reading instruction, *Writing Next* highlights specific teaching techniques that work in the classroom. It does so by summarizing the results of a large-scale statistical review of research into the effects of specific types of writing instruction on adolescents' writing proficiency. Although several important reviews of research on writing instruction exist (e.g., Langer & Applebee, 1987; Levy & Ransdell, 1996; MacArthur, Graham, & Fitzgerald, 2006; Smagorinsky, 2006), the special strength of this report is its use of a powerful statistical method known as meta-analysis. This technique allows researchers to determine the *consistency* and *strength* of the effects of instructional practices on student writing quality and to highlight those practices that hold the most promise.

The Recommendations

Eleven Elements of Effective Adolescent Writing Instruction

This report identifies 11 elements of current writing instruction found to be effective for helping adolescent students learn to write well and to use writing as a tool for learning. It is important to note that all of the elements are supported by rigorous research, but that even when used together, they do not constitute a full writing curriculum.

1. **Writing Strategies**, which involves teaching students strategies for planning, revising, and editing their compositions
2. **Summarization**, which involves explicitly and systematically teaching students how to summarize texts
3. **Collaborative Writing**, which uses instructional arrangements in which adolescents work together to plan, draft, revise, and edit their compositions
4. **Specific Product Goals**, which assigns students specific, reachable goals for the writing they are to complete
5. **Word Processing**, which uses computers and word processors as instructional supports for writing assignments
6. **Sentence Combining**, which involves teaching students to construct more complex, sophisticated sentences
7. **Prewriting**, which engages students in activities designed to help them generate or organize ideas for their composition
8. **Inquiry Activities**, which engages students in analyzing immediate, concrete data to help them develop ideas and content for a particular writing task
9. **Process Writing Approach**, which interweaves a number of writing instructional activities in a workshop environment that stresses extended writing opportunities, writing for authentic audiences, personalized instruction, and cycles of writing

10. **Study of Models**, which provides students with opportunities to read, analyze, and emulate models of good writing
11. **Writing for Content Learning**, which uses writing as a tool for learning content material

The *Writing Next* elements do not constitute a full writing curriculum, any more than the *Reading Next* elements did for reading. However, all of the *Writing Next* instructional elements have shown clear results for improving students' writing. They can be combined in flexible ways to strengthen adolescents' literacy development. The authors hope that besides providing research-supported information about effective writing instruction for classroom teachers, this report will stimulate discussion and action at policy and research levels, leading to solid improvements in writing instruction in grades 4 to 12 nationwide.

RECOMMENDATIONS: 11 KEY ELEMENTS OF EFFECTIVE ADOLESCENT WRITING INSTRUCTION AS IDENTIFIED BY META-ANALYSIS

This report provides long-needed guidance for teachers and policymakers by identifying specific instructional practices that improve the quality of adolescent students' writing. The special contribution of this report is that it draws from empirical evidence.

The authors set out to collect, categorize, and analyze experimental and quasi-experimental research on adolescent writing instruction in order to determine which elements of existing instructional methods are reported to be effective by research. The method used, meta-analysis, provides a measure of effectiveness using the effect size statistic. On the basis of the effect sizes found, *Writing Next* presents 11 elements of effective adolescent writing instruction. (A detailed description of the methodology used is found in Appendix A.)

Effective Elements to Improve Writing Achievement in Grades 4 to 12	
1. Writing Strategies	7. Prewriting
2. Summarization	8. Inquiry Activities
3. Collaborative Writing	9. Process Writing Approach
4. Specific Product Goals	10. Study of Models
5. Word Processing	11. Writing for Content Learning
6. Sentence-Combining	

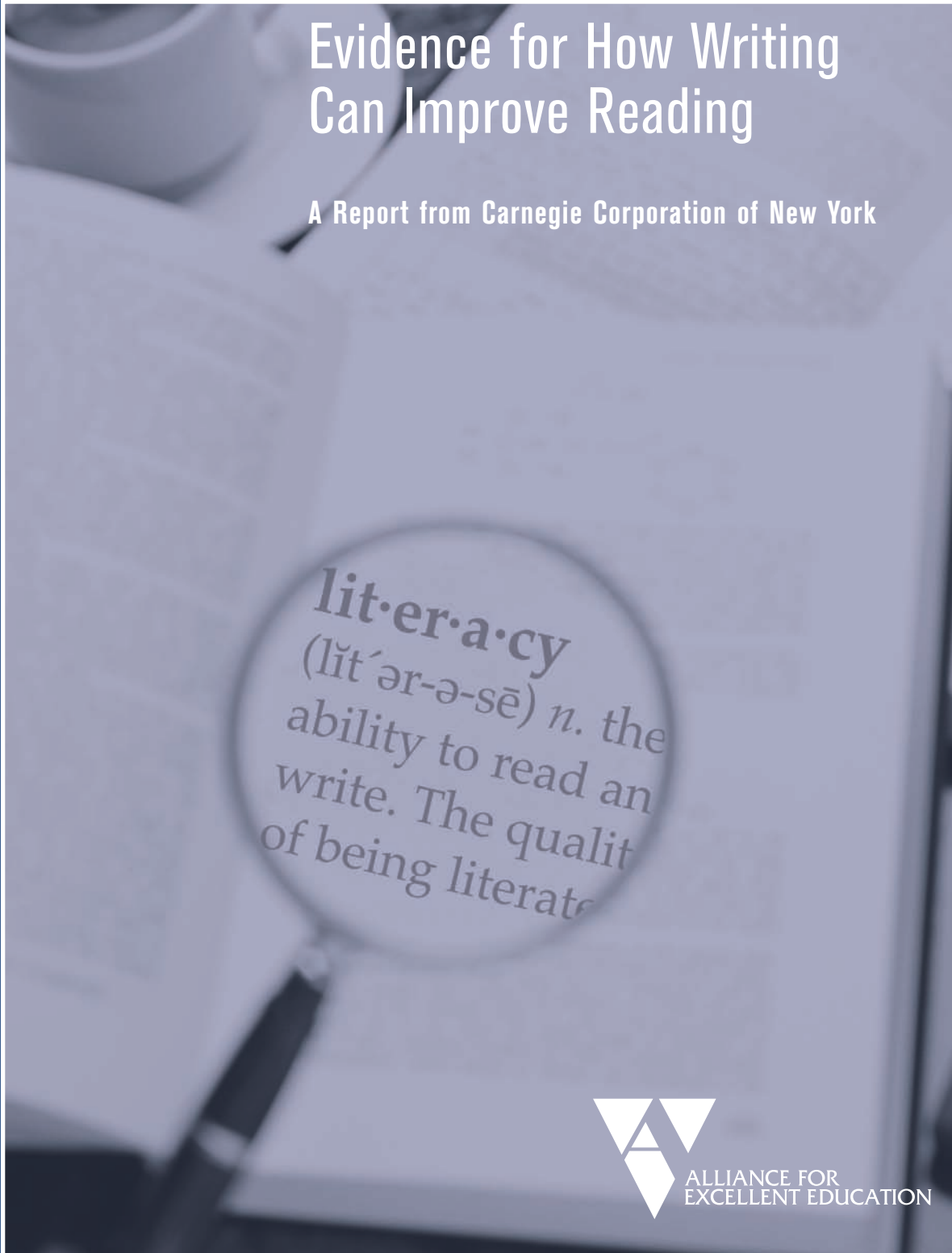
No single approach to writing instruction will meet the needs of all students. Also, some extant techniques may be effective but have not yet been studied rigorously. There is a tremendous need for more research on and dissemination of adolescent writing interventions that work, so that administrators and teachers can select the strategies that are most appropriate, whether for whole classrooms, small groups, or individual students.

Though each instructional element is treated as a distinct entity, the different elements are often related, and the addition of one element can stimulate the inclusion of another. In an ideal world, teachers would be able to incorporate all of the 11 key elements in their everyday writing curricula, but the list may also be used to construct a unique blend of elements suited to specific student needs. The elements should not be seen as isolated but rather as interlinked. For instance, it is difficult to implement the process writing approach (element 9) without having peers work together (element 3) or use prewriting supports (element 7). A mixture of these elements is likely to generate the biggest return. It remains to be seen what that optimal mix is, and it may be different for different subpopulations of students. However, it is important to stress that these 11 elements are not meant to constitute a curriculum.

Writing to Read

Evidence for How Writing Can Improve Reading

A Report from Carnegie Corporation of New York

A magnifying glass is positioned over an open dictionary. The lens is focused on the entry for 'literacy'. The background of the entire page is a blue gradient. The right side of the page features a faded image of a desk with a magnifying glass over a dictionary.

lit·er·a·cy
(lĭt'ər-ə-sē) *n.* the
ability to read and
write. The quality
of being literate

Steve Graham and
Michael Hebert
Vanderbilt University



ALLIANCE FOR
EXCELLENT EDUCATION

Acknowledgments

The authors would like to thank Andrés Henríquez, program officer at Carnegie Corporation of New York, who offered helpful suggestions in conceptualizing and reporting the research reviewed. We also wish to thank Paul Morphy, who provided technical assistance in calculating some effect sizes, as well as Rachel Mathias, Nicole Beitler, and Angeline Clark, who helped with various aspects of the project, including conducting electronic searches and locating studies. A special thanks goes to Andrew Wilson, Gina Biancarosa, and Bob Rothman, who took our original document and reworked it so that it was suitable for a broad audience. Finally, we especially appreciated feedback from the National Writing Project on how to make the initial draft of the document better.

Steve Graham

Michael Hebert

FOREWORD

Around the world, from the cave paintings in Lascaux, France, which may be 25,000 years old, to the images left behind by the lost Pueblo cultures of the American Southwest, to the ancient aboriginal art of Australia, the most common pictograph found in rock paintings is the human hand. Coupled with pictures of animals, with human forms, with a starry night sky or other images that today, we can only identify as abstract, we look at these men's and women's hands, along with smaller prints that perhaps belong to children, and cannot help but be deeply moved by the urge of our ancestors to leave some permanent imprint of themselves behind.

Clearly, the instinct for human beings to express their feelings, their thoughts, and their experiences in some lasting form has been with us for a very long time. This urge eventually manifested itself in the creation of the first alphabet, which many attribute to the Phoenicians. When people also began to recognize the concept of time, their desire to express themselves became intertwined with the sense of wanting to leave behind a legacy, a message about who they were, what they had done and seen, and even what they believed in. Whether inscribed on rock, carved in cuneiform, painted in hieroglyphics, or written with the aid of the alphabet, the instinct to write down everything from mundane commercial transactions to routine daily occurrences to the most transcendent ideas—and then to have others read them, as well as to read what others have written—is not simply a way of transferring information from one person to another, one generation to the next. It is a process of learning and hence, of education.

Ariel and Will Durant were right when they said, “Education is the transmission of civilization.” Putting our current challenges into historical context, it is obvious that if today's youngsters cannot read with understanding, think about and analyze what they've read, and then write clearly and effectively about what they've learned and what they think, then they may never be able to do justice to their talents and their potential. (In that regard, the etymology of the word *education*, which is “to draw out and draw forth”—from oneself, for example—is certainly evocative.) Indeed, young people who do not have the ability to transform thoughts, experiences, and ideas into written words are in danger of losing touch with the joy of inquiry, the sense of intellectual curiosity, and the inestimable satisfaction of acquiring wisdom that are the touchstones of humanity. What that means for all of us is that the essential educative transmissions that have been passed along century after century, generation after generation, are in danger of fading away, or even falling silent.

In a recent report, the National Commission on Writing also addresses this concern. They say, “If students are to make knowledge their own, they must struggle with the details, wrestle with the facts, and rework raw information and dimly understood concepts into language they can communicate to someone else. In short, if students are to learn, they must write.”

It is in this connection that I am pleased to introduce *Writing to Read*, which builds on *Writing Next* by providing evidence for how writing can improve reading. As both reports warn, American students today are not meeting even basic literacy standards and their teachers are often at a loss for how to help them. In an age overwhelmed by information (we are told, for example, that all available information doubles every two to three years), we should view this as a crisis, because the ability to read, comprehend, and write—in other words, to organize information into *knowledge*—can be viewed as tantamount to a survival skill. Why? Because in the decades ahead, Americans face yet another challenge: how to keep our democracy and our society from being divided not only between rich and poor, but also between those who have access to information and knowledge, and thus, to power—the power of enlightenment, the power of self-improvement and self-assertion, the power to achieve upward mobility, and the power over their own lives and their families’ ability to thrive and succeed—and those who do not.

Such an uncrossable divide will have devastating consequences for the future of America. Those who enrich themselves by learning to read with understanding and write with skill and clarity do so not only for themselves and their families, but for our nation as well. They learn in order to preserve and enhance the record of humanity, to be productive members of a larger community, to be good citizens and good ancestors to those who will follow after them. In an age of globalization, where economies sink or swim on their ability to mine and manage knowledge, as do both individual and national security, we cannot afford to let this generation of ours and, indeed, any other, fall behind the learning curve. Let me bring us back to where we began: for all of us, the handprint must remain firmly and clearly on the wall.

Vartan Gregorian

President, Carnegie Corporation of New York

*Note: This text originally appeared as the forward to *Writing Next*, and is reprinted here with minor changes. Our deep thanks to Vartan Gregorian for permitting us to reprint it.

EXECUTIVE SUMMARY

The Challenge

Although some progress has been made in improving the literacy achievement of students in American schools during the last twenty years (Lee, Grigg, and Donahue, 2007; Salahu-Din, Persky, and Miller, 2008), the majority of students still do not read or write well enough to meet grade-level demands. Poor literacy skills play a role in why many of these students do not complete high school. Among those who do graduate, many will not be ready for college or a career where reading and writing are required. These young people will find themselves at a serious disadvantage in successfully pursuing some form of higher education, securing a job that pays a living wage, or participating in social and civic activities.

The financial and social costs of poor literacy have been well documented (Greene, 2000). The consequences of poor reading and writing skills not only threaten the well-being of individual Americans, but the country as a whole. Globalization and technological advances have changed the nature of the workplace. Reading and writing are now essential skills in most white- and blue-collar jobs. Ensuring that adolescents become skilled readers and writers is not merely an option for America, it is an absolute necessity.

The Approach

During this decade there have been numerous efforts to identify instructional practices that improve adolescents' literacy skills, such as *Reading Next* (Biancarosa and Snow, 2004), which drew a set of fifteen instructional recommendations for an effective adolescent literacy program based on the professional knowledge and research of nationally known and respected literacy researchers. Such efforts also include systematic reviews of high-quality research to identify effective instructional practices for improving the comprehension of struggling adolescent readers (Scamacca et al., 2007), as well as similar analyses to identify effective practices for improving adolescent students' writing (Graham and Perin, 2007a; Rogers and Graham, 2008).

Despite these efforts, educators and policymakers need additional evidence-based practices for improving the literacy skills of students in American schools.

One often-overlooked tool for improving students' reading, as well as their learning from text, is writing. Writing has the theoretical potential for enhancing reading in three ways. First, reading and writing are both functional activities that can be combined to accomplish specific goals, such as learning new ideas presented in a text (Fitzgerald and Shanahan, 2000). For instance, writing about information in a science text should facilitate comprehension and learning, as it provides the reader with a means for recording, connecting, analyzing, personalizing, and manipulating key ideas from the text. Second, reading and writing are connected, as they draw upon common knowledge and cognitive processes (Shanahan, 2006). Consequently, improving students' writing skills should result in improved reading skills. Third, reading and writing are both communication activities, and writers should gain insight about reading by creating their own texts (Tierney and Shanahan, 1991), leading to better comprehension of texts produced by others.

This report provides evidence answering the following three questions:

1. Does writing about material students read enhance their reading comprehension?
2. Does teaching writing strengthen students' reading skills?
3. Does increasing how much students write improve how well they read?

Although writing is typically recommended as a part of a strong literacy program (e.g., Biancarosa and Snow, 2004), and several important reviews have selectively examined the impact of writing on reading (e.g., Applebee, 1984; Emig, 1977; Klein, 1999; Neville and Searls, 1991; Smith, 1988; Stotsky, 1982), the special strength of this report is that it comprehensively summarizes high-quality research using the powerful statistical method of meta-analysis. This technique allows researchers to determine the consistency and strength of the effects of an instructional practice, and to highlight practices holding the most promise.

Writing Next presented the results of a large-scale statistical review of research on the effects of specific types of writing interventions, and identified specific teaching techniques for improving the quality of adolescent students' writing. *Writing to Read* draws on the same type of statistical review of the research to highlight writing techniques shown to enhance students' reading.

To be successful, students today need strong literacy skills, and also need to be able to use these skills as tools for ongoing learning. This report builds on *Writing Next* by identifying writing practices found to be effective in helping students increase their reading skills and comprehension. We hope that besides providing classroom teachers with research-supported information about how writing can improve reading, our data will stimulate discussion and action at the policy and research levels, leading to the greater use of writing as a tool for enhancing reading and a greater emphasis on the teaching of writing in our nation's schools.

The Recommendations

Writing Practices That Enhance Students' Reading

This report identifies a cluster of closely related instructional practices shown to be effective in improving students' reading. We have grouped these practices within three core recommendations, here listed in order of the strength of their supporting evidence.

- I. **HAVE STUDENTS WRITE ABOUT THE TEXTS THEY READ.** Students' comprehension of science, social studies, and language arts texts is improved when they write about what they read, specifically when they
 - **Respond to a Text in Writing (Writing Personal Reactions, Analyzing and Interpreting the Text)**
 - **Write Summaries of a Text**
 - **Write Notes About a Text**
 - **Answer Questions About a Text in Writing, or Create and Answer Written Questions About a Text**
- II. **TEACH STUDENTS THE WRITING SKILLS AND PROCESSES THAT GO INTO CREATING TEXT.** Students' reading skills and comprehension are improved by learning the skills and processes that go into creating text, specifically when teachers
 - **Teach the Process of Writing, Text Structures for Writing, Paragraph or Sentence Construction Skills (Improves Reading Comprehension)**
 - **Teach Spelling and Sentence Construction Skills (Improves Reading Fluency)**
 - **Teach Spelling Skills (Improves Word Reading Skills)**
- III. **INCREASE HOW MUCH STUDENTS WRITE.** Students' reading comprehension is improved by having them increase how often they produce their own texts.

Writing to Read does not identify all the ways that writing can enhance reading, any more than *Writing Next* identified all of the possible ways to improve students' writing. However, all of the *Writing to Read* instructional recommendations have shown clear results for improving students' reading.

Nonetheless, even when used together these practices do not constitute a full curriculum. The writing practices described in this report should be used by educators in a flexible and thoughtful way to support students' learning.

The evidence is clear: writing can be a vehicle for improving reading. In particular, having students write about a text they are reading enhances how well they comprehend it. The same result occurs when students write about a text from different content areas, such as science and social studies.

This result is consistent with the finding from *Writing Next* that writing about science, math, and other types of information promotes students' learning of the material. In addition, teaching writing not only improves how well students write, as demonstrated in *Writing Next*; it also enhances students' ability to read a text accurately, fluently, and with comprehension. Finally, having students spend more time writing has a positive impact on reading, increasing how well students comprehend texts written by others. Taken together, these findings from *Writing to Read* and *Writing Next* highlight the power of writing as a tool for improving both reading and content learning.

RECOMMENDATIONS FOR USING WRITING TO IMPROVE READING, AS IDENTIFIED BY META-ANALYSIS

Writing is often recommended as a tool for improving reading. In *Reading Next* (Biancarosa and Snow, 2004), intensive writing was identified as a critical element of an effective adolescent literacy program. *Reading Next* stated that writing instruction improves reading comprehension and that the teaching of writing skills such as grammar and spelling reinforces reading skills. It is also believed that writing about a text improves comprehension, as it helps students make connections between what they read, know, understand, and think (Carr, 2002).

This report provides long-needed guidance for teachers and policymakers by identifying specific writing practices that enhance students' reading abilities. The special contribution of this report is that it draws on empirical evidence in grades 1–12 in doing so. Its findings show that having students write about texts they read, explicitly teaching writing skills and processes, and having students write more *do* improve reading skills and comprehension.

We set out to collect, categorize, and analyze experimental and quasi-experimental data on the effectiveness of writing practices for improving students' reading skills and comprehension.

The empirical evidence from this analysis resulted in the identification of research-supported writing practices for improving students' reading.

The method used, meta-analysis, provides a measure of effectiveness using the effect size statistic.

A TECHNICAL NOTE ON EXPERIMENTAL AND QUASI-EXPERIMENTAL STUDIES

The benefit of using experimental and quasi-experimental types of studies for our review is that they allow for stronger inferences about cause-and-effect relationships than do other types of studies. In both, children in an experimental group receive a specific intervention (or treatment) and their performance is compared to a control group of children that receives a different treatment or no treatment. Experimental studies control for preexisting differences between students in the two groups through random assignment to a group, while quasi-experimental studies do so through other means. For the current analysis, we only included quasi-experimental studies that assessed students' reading performance at the start of the study, so that possible preexisting differences between students in each condition could be controlled.

The Meta-Analysis

Meta-analysis is a statistical technique for integrating, summarizing, and interpreting sets of empirical research that involve quantitative measures (Lipsey and Wilson, 2001). In this report, meta-analysis was used to investigate the effectiveness of writing about text, the effectiveness of the teaching of writing, and the effectiveness of having students write more.

This is the first meta-analysis examining the effects of different writing practices on students' reading performance. Previous meta-analyses focused only on single practices, such as the impact of sentence combining on reading comprehension (e.g., Neville and Searls, 1991), aggregated reading measures with other types of outcome measures (Bangert-Drowns, Hurley, and Wilkinson, 2004), or did not isolate the effect of the writing practice (Moore and Readence, 1984). The findings in this report are cumulative in that they build on earlier reviews examining the impact of writing on reading (e.g., Applebee, 1984; Emig, 1977; Graham and Perin, 2007a; Klein, 1999; Moore and Readence, 1984; Neville and Searls, 1991; NICHD, 2000; Smith, 1988; Stotsky, 1982). All pertinent studies from these prior reviews were included, and new studies were located through an extensive search of the literature (see Appendix A for details).

The recommendations from this review are in no way meant to detract from the significant contributions that other types of research make to the understanding of the effects of writing on reading. Likewise, many perspectives, including cognitive, sociocultural, rhetorical, cross-curricular, linguistic, and student centered (see Fitzgerald and Shanahan, 2000; Shanahan, 2006), contribute to knowledge of how writing influences reading.

A TECHNICAL NOTE ON META-ANALYSIS

What is a meta-analysis?

Meta-analysis is a particularly powerful way of summarizing large bodies of research, as it aggregates conceptually similar quantitative measures by calculating an effect size for each study. The strength of meta-analysis is that it allows consideration of both the strength and the consistency of a treatment's effects.

What is an effect size?

An effect size reports the average difference between one type of instruction and a control condition. It indicates the **strength** of the effect. The following guidelines provide a benchmark for interpreting the magnitude of an effect:

0.20 = **small** or mild effect

0.50 = **medium** or moderate effect

0.80 = **large** or strong effect

A **positive** effect size means the writing treatment had a positive effect on students' reading when compared to the control condition.

A **negative** effect size means that the control condition had a stronger effect on students' reading than the writing treatment.

Although these guidelines are commonly accepted, it is important to interpret an effect size within the context of a given field. Consequently, the findings from this meta-analysis are compared to findings from other meta-analyses examining different reading interventions (i.e., NICHD, 2000; Rosenshine and Meister, 1994; Slavin, Cheung, Groff, and Lake, 2008). Such comparison better contextualizes the power of writing as a means of improving reading achievement.

Also, it is important to remember that a large number of factors that influence youngsters' literacy outcomes and the difficulty of improving reading, especially for older students, render any significant effect meaningful.

Appendix A describes the methodology used in the meta-analysis.

Appendix B lists all the studies that were analyzed and provides descriptive information about each.

THE RECOMMENDATIONS

Effective Practices for Strengthening Reading Through Writing

- I. **HAVE STUDENTS WRITE ABOUT THE TEXTS THEY READ.** Students' comprehension of science, social studies, and language arts texts is improved when they write about what they read, specifically when they
 - **Respond to a Text in Writing (Writing Personal Reactions, Analyzing and Interpreting the Text)**
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 - **Teach Spelling and Sentence Construction Skills (Improves Reading Fluency)**
 - **Teach Spelling Skills (Improves Word Reading Skills)**
- II. **INCREASE HOW MUCH STUDENTS WRITE.** Students' reading comprehension is improved by having them increase how often they produce their own texts.

In the following sections, we discuss each of these findings in turn by discussing the theory behind the practices and the results of the analysis. In several places, we also elaborate the activities involved in implementing the practices. Results are reported in effect size statistics, which allow us to understand the magnitude of impact an instructional practice can have on student outcomes.

When reading these sections, readers should keep in mind three important aspects of effect sizes. First, while it is tempting to regard practices that have large effect sizes as more effective than those with small effect sizes, effect sizes cannot be interpreted in this fashion. The effects we estimate for a particular practice always exist in relation to whatever practices were used in the “control” condition. In short, the effects for any two practices described in this report cannot be compared directly to or against each other.

Second, we report the effect sizes we found for two types of tests commonly used in research: norm-referenced tests and researcher-designed tests (see sidebar on page 12). Norm-referenced tests generally yield much smaller effect sizes than researcher-designed tests do. For example, two of the most robust reading instructional practices for improving children's reading comprehension, Reciprocal Teaching and generating questions, have effect sizes of 0.32 and 0.36 respectively when assessed using norm-referenced tests, and effect sizes of 0.88 and 0.86 respectively when assessed using researcher-designed

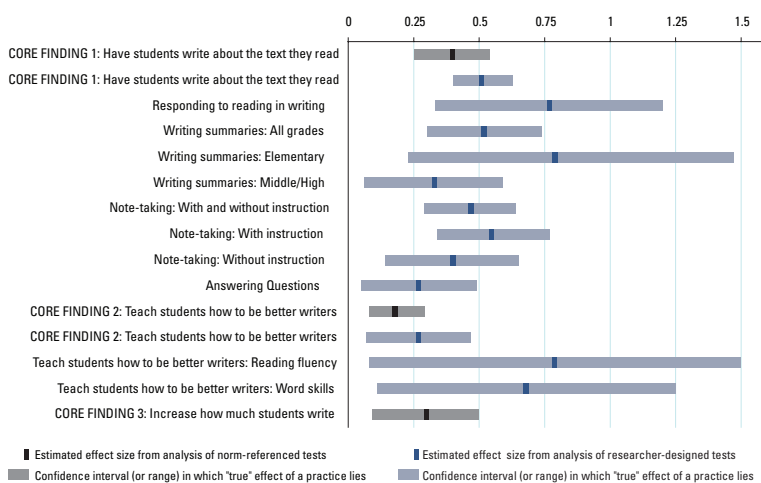
measures (Rosenshine and Meister, 1994; Rosenshine, Meister, and Chapman, 1996). Similar differences in effect sizes for different tests are found throughout our report (see graph below).

Third, because effect sizes are statistics, we can estimate more than the average effect size—we can also estimate a confidence interval. The confidence interval specifies the range in which we think the “true” effect of a practice lies. Thus, we present confidence intervals around the effect sizes we found in Figure 1. In general, confidence intervals tend to be smaller when the number of studies we have is bigger and also when tests are more precise. In fact, readers will likely note that we have a few very large confidence intervals for some of the effects. These large ranges suggest that we are less certain of a practice’s real effect, but critically we are still quite certain that there is an effect because none of these confidence intervals extends as low as zero. As a result, even when confidence intervals are large, we are reasonably certain that these practices do affect students in a positive way, we are just less certain of how large that effect is.

NORM-REFERENCED VS. RESEARCH-DESIGNED TESTS

Norm-referenced tests are designed to represent an individual’s ability relative to the range of abilities of a population on a measured skill. In contrast, researcher-designed tests generally do not have the time or the resources to sample the full range of abilities of a measured skill, and therefore cannot place an individual’s performance in that context. Even so, researchers generally take steps to ensure that their test results are as reliable as possible. Because of these differences, norm-referenced tests tend to have smaller margins of error when estimating student abilities. As a result, norm-referenced tests tend to yield smaller effect sizes and smaller confidence intervals. Nonetheless, both types of tests yield important information about the effectiveness of instruction. Whereas norm-referenced tests help us understand how well a targeted skill generalizes to other similar tasks, researcher-designed tests help us understand how well an intervention impacts a targeted skill.

WRITING TO READ EFFECT SIZES WITH CONFIDENCE INTERVALS



I. HAVE STUDENTS WRITE ABOUT THE TEXT THEY READ

Average Weighted Effect Size = 0.40 Published Standardized Norm-Referenced Tests (Based on 11 Studies)
 Average Weighted Effect Size = 0.51 Researcher-Designed Tests (Based on 50 Studies)

Comprehending a text involves actively creating meaning by building relationships among ideas in text, and between the text and one's knowledge, beliefs, and experiences (Wittrock, 1990). Having students write about a text should enhance reading comprehension because it affords greater opportunities to think about ideas in a text, requires them to organize and integrate those ideas into a coherent whole, fosters explicitness, facilitates reflection, encourages personal involvement with texts, and involves students transforming ideas into their own words (Applebee, 1984; Emig, 1977; Klein, 1999; Smith, 1988; Stotsky, 1982). In short, writing about a text should enhance comprehension because it provides students with a tool for visibly and permanently recording, connecting, analyzing, personalizing, and manipulating key ideas in text.

The evidence shows that having students write about the material they read *does* enhance their reading abilities. In fact, fifty-seven out of sixty-one outcomes (93 percent) were positive, indicating a consistent and positive effect for writing about what is read. The impact of writing about reading applied broadly across different levels of schooling, as students participating in this research were in grades 2–12, with the majority in middle or high school. These positive effects were evident when students wrote about text in science and social studies as well as in English (60 percent of comparisons involved these disciplines; see Appendix B).

These effect sizes compared favorably with effects obtained by other researchers examining the impact of specific reading approaches, such as reading programs at the secondary level, reciprocal teaching (a popular method for teaching comprehension), and vocabulary instruction. The effect size for writing about text that was read (0.40) exceeded each of these effects, providing additional validation of its effectiveness as a tool for improving students' reading comprehension.

Writing about read texts was also an effective activity for lower-achieving students. In twelve studies involving such students, the average weighted effect size for writing about a text was 0.63. However, the average weighted effect size for writing about text activities was not greater than zero when lower-achieving students were not explicitly taught how to use them. This was not the case when such instruction was provided, as was true in the other nine studies. Although these findings must be viewed cautiously due to the small number of studies, they suggest that having lower-achieving students write about text without teaching them how to do so may not be effective. Our findings are consistent with findings from other reviews that explicit instruction is an important ingredient in the successful teaching of literacy practices (e.g., Graham and Perin, 2007a; NICHD, 2000).

Writing about a text proved to be better than just reading it, reading and rereading it, reading and studying it, reading and discussing it, and receiving reading instruction. These above-mentioned reading activities were undertaken 87 percent of the time by students in the control conditions.

The average weighted effect sizes for writing about text read versus these control conditions was positive and significant (0.35 for published standardized norm-referenced tests in nine studies and 0.49 for researcher-designed ones in forty-four studies).

We next consider how different types of writing about reading activities influence students' comprehension of text. These analyses are based on the findings from the sixty-one studies above.

Have Students Respond to a Text (Writing Personal Reactions, Analyzing and Interpreting the Text)

Average Weighted Effect Size = 0.77 Researcher-Designed Tests (Based on 9 Studies)

Writing an extended response to material involves either a personal reaction to the text or analysis and interpretation of it. The former includes writing a personal response to narrative material read or writing about a personal experience related to it. Analysis and interpretation activities, in contrast, focus on writing an analysis of the characters in a novel, writing a paper showing how to apply material that was read, composing a letter to another student explaining how to play a game described in a text, and analyzing a text in writing to develop a particular point of view. Newer and better understandings of textual material are likely to occur when students write about text in extended ways involving analysis, interpretation, or personalization (Langer and Applebee, 1987).

Our review of the data shows that extended writing has a strong and consistently positive impact on reading comprehension. All nine of the comparisons produced a positive outcome. Extended writing produced greater comprehension gains than simply reading the text, reading and rereading it, reading and studying it, reading and discussing it, and receiving reading instruction. These reading activities served as control conditions in all nine studies. (Note that in contrast to the other

EXTENDED WRITING: EXAMPLES

With **guided journal writing** students respond to text by answering open-ended questions about it in writing. For example, students might be asked to analyze why they think characters acted as they did and indicate what they would do in the same situation.

Source: Wong, Kuperis, Jamieson, Keller, and Cull-Hewitt (2002).

Students might also be asked to complete an **analytic essay** about the material they are reading. For instance, after reading about the history of the industrial revolution, students might be asked to write an essay in which they identify the three most important reasons for industrial growth during the nineteenth and twentieth centuries and explain the reasons for each of their choices.

Source: Langer and Applebee (1987).

writing about reading activities studied in this review, students were not expressly taught how to write extended responses. Finally, for writing a personal response to text, students applied this procedure over a three- to fourth-month period in several studies.)

Have Students Write Summaries of a Text

Average Weighted Effect Size = 0.52 Researcher-Designed Tests (Based on 19 Studies)

Transforming a mental summary of text into writing requires additional thought about the essence of the material, and the permanence of writing creates an external record of this synopsis that can be readily critiqued and reworked. As a result, summary writing seems likely to improve comprehension of the material being summarized.

Summary writing practices studied ranged from writing a synopsis with little to no guidance (e.g., writing a one-sentence summary) to the use of a variety of different guided summarizing strategies such as writing a summary of text using a set of rules or steps; developing a written outline of text and converting it to a summary; locating the main idea in each paragraph and summarizing it; and creating a written/graphic organizer of important information and converting it to a summary.

For students in grades 3–12, writing summaries about text showed a consistently positive impact on reading comprehension. Seventeen of the nineteen comparisons (89 percent) produced a positive outcome. While summary writing significantly improved middle and high school students' comprehension of text (average weighted effect size = 0.33 based on eleven studies), it had an even stronger effect on elementary students' comprehension (average weighted effect size = 0.79 based on four studies).

SUMMARY WRITING: EXAMPLES

Students are directly taught rules for how to **write a summary of material read**. This can involve teaching them how to write a summary of a paragraph using the following operations:

- 1) identify or select the main information;
- 2) delete trivial information;
- 3) delete redundant information; and
- 4) write a short synopsis of the main and supporting information for each paragraph.

In teaching this strategy, the teacher first explains each step and its purposes. Use of the strategy is then modeled, and students practice applying it, receiving teacher help and assistance as needed.

Source: Rinehart, Stahl, and Erickson (1986).

A different summary writing method focuses on the summarization of longer text. Students begin by creating a skeleton outline, starting with a thesis statement for the passage. Next, they generate main idea subheadings for each section of the text, and add two or three important details for each main idea. They then convert their outline into a written summary of the whole text.

Source: Taylor and Beach (1984).

Writing summaries about a text proved to be better than simply reading it, reading and rereading it, reading and studying it, and receiving reading instruction. The above reading activities served as control conditions in all but four studies (74 percent). The average weighted effect size decreased slightly, to 0.48, when summary writing was compared to control conditions only involving reading activities.

Have Students Write Notes About a Text

Average Weighted Effect Size = 0.47 Researcher-Designed Tests (Based on 23 Studies)

The act of taking written notes about text material should enhance comprehension (Kiewra, 1989; Peverly et al., 2007). This writing practice involves sifting through a text to determine what is most relevant and transforming and reducing the substance of these ideas into written phrases or key words. Intentionally or unintentionally, note takers organize the abstracted material in some way, connecting one idea to another, while blending new information with their own knowledge, resulting in new understandings of texts.

In the studies we reviewed, taking notes about text ranged from a prompt to take notes with little or no direction to the use of a wide variety of structured note-taking procedures such as developing a written outline of text; designing a written chart showing the relationship between key ideas, details, concepts, and vocabulary in text; and taking notes about text and separating these notes into different columns related to main ideas, details, and questions.

For students in grades 3–12, the various note-taking activities studied had a moderate and consistently positive impact on reading comprehension. Twenty-one of the twenty-three comparisons (91 percent) produced a positive outcome.

Taking notes about text proved to be better than just reading, reading and rereading, reading and studying, reading and underlining important information, and receiving explicit instruction in reading practices. The above reading activities served as the control conditions in all but two studies. The average weighted effect size increased slightly, to 0.48, when note taking was compared to control conditions only involving reading activities.

NOTE TAKING: EXAMPLES

Structured note taking involves creating a written organizational structure for material read. With one approach, students are taught how to create an organizer resembling a flow chart, depicting changes in the events of a story over time.

Source: Denner (1987).

Concept mapping is another approach for helping students organize their notes about material read. Students place each important concept from text in a circle and then show how the concepts link together using words and lines. One way of teaching this strategy is to first present a model of an *expert concept map* for a particular reading. After discussing this map, students then practice completing other *expert maps* that are incomplete, moving from more to less complete maps, until they can create their own map for material read.

Source: Chang, Chen, and Sung (2002).

Have Students Answer Questions About a Text in Writing, or Create and Answer Written Questions About a Text

Average Weighted Effect Size = 0.27 Researcher-Designed Tests (Based on 8 Studies)

Answering questions about a text can be done verbally, but there is greater benefit from performing such activities in writing. Writing answers to text questions makes them more memorable, as writing an answer provides a second form of rehearsal. This practice should further enhance the quality of students' responses, as written answers are available for review, reevaluation, and reconstruction (Emig, 1977).

For generating or responding to questions in writing, students either answered questions about a text in writing; received practice doing so; wrote their own questions about text read; or learned how to locate main ideas in a text, generated written questions for them, and then answered them in writing. These practices had a small but consistently positive impact on improving the reading comprehension of students in grade 6–12 when compared to reading or reading instruction. All eight of the studies resulted in a positive outcome for generating or answering questions in writing.

QUESTIONS: EXAMPLES

Answering questions in writing involves writing responses to questions inserted into text or presented at the end of a segment of text. For example, students may be asked to write short answers to four questions (one detail, two inferences, and one main idea) after reading a segment of text. They then check and correct their responses before reading the next segment of text.

Source: Peverly and Wood (2001).

Generating questions in writing is a strategy where students create written questions about text. For instance, students are taught the difference between a good question and a bad question, and then practice generating and answering their own questions about text. If they cannot answer a question, they generate a new one that can be answered.

Source: Cohen (1983).

II. TEACH STUDENTS THE WRITING SKILLS AND PROCESSES THAT GO INTO CREATING TEXT

While writing and reading are not identical skills, both rely on common processes and knowledge (Fitzgerald and Shanahan, 2000). Consequently, educators have long believed that the benefits of writing instruction carry over to improved reading. Our evidence shows that writing instruction does in fact strengthen a variety of reading skills.

Teach the Process of Writing, Text Structures for Writing, Paragraph or Sentence Construction Skills (Improves Reading Comprehension)

Average Weighted Effect Size = 0.18 Published Standardized Norm-Referenced Tests (Based on 12 Studies)
Average Weighted Effect Size = 0.27 Researcher-Designed Tests (Based on 5 Studies)

Teaching patterns for constructing sentences or larger units of text should improve reading skills. The practice of putting smaller units of writing together to create more complex ones should result in

greater skill in understanding such units in reading (Neville and Searls, 1991). This is the basic premise behind the writing instructional strategy known as sentence combining (Saddler and Graham, 2005). Better understanding of even larger units in text should be facilitated by teaching students basic structures for writing paragraphs, or common elements included in specific types of writing, such as persuasive essays.

Writing instruction did in fact show a small, but consistently positive, impact on reading comprehension when measured by both norm-referenced published standardized tests and researcher-designed tests. The outcomes in all studies were positive. The control condition in most of these studies (79 percent) was reading or reading instruction. When only these studies were considered, the average weighted effect size rose slightly, to 0.23 on published standardized norm-referenced tests (based on nine studies) and 0.30 on researcher-designed tests (based on four studies).

The effect of writing instruction on published standardized norm-referenced tests compares favorably with effects obtained in two other reviews examining the impact of a range of reading programs (Slavin et al., 2008) and vocabulary instruction (Elleman et al., 2009). (However, it was smaller than the effect of 0.32 obtained by Rosenshine and Meister [1994] for reciprocal teaching of comprehension strategies.)

It is important to note that there was variability in the types of writing instruction provided to students. These different types of writing instruction included the process approach, where students write frequently for real audiences; engage in cycles of planning, drafting, and revising text; take personal responsibility and ownership of writing projects; interact and help each other with their writing; participate in a supportive writing environment; and receive assistance and instruction as needed (Graham and Perin, 2007b). Note that studies examining process writing were limited to grades 1–4.

WRITING INSTRUCTION: EXAMPLES

One writing instructional procedure that facilitates reading growth is **sentence combining**. With this method, the teacher models how to combine simpler sentences into more complex ones. Students then practice combining similar sentences. An interesting twist on this approach is to have students combine sentences in material they are reading or disassemble such sentences.

Source: Hunt and O'Donnell (1970).

Students' reading skills can also be enhanced by teaching them how to use **text structure** as an aid for writing text. To illustrate, students are taught the basic elements of persuasion by identifying and discussing them in model essays. They then write their own persuasive texts using these elements, and revise the texts based on feedback from peers and the teacher.

Source: Crowhurst (1991).

We also included studies where other writing skills were systematically and explicitly taught to students. In several studies, this practice involved teaching a variety of skills, including how to write sentences, paragraphs, and longer units of text. In other instances, it involved teaching students how to write

more sophisticated sentences by learning how to combine less complex sentences into more complex ones. It further included several studies where students learned to use the structure of specific types of texts as a model or tool for writing their own papers. Finally, the spelling of content words was taught in one investigation. Studies examining the effectiveness of these approaches (instruction in spelling; instruction in writing sentences, paragraphs, and longer units of text) were limited to grades 4–12. In these twelve studies, the average weighted effect size on norm-referenced standardized measures of reading was 0.16. (Although small, the effect was statistically significant and compared favorably to the 0.17 effect size obtained by Slavin et al. [2008] in their meta-analysis of middle and high school reading programs.)

Teach Spelling and Sentence Construction Skills (Improves Reading Fluency)

Average Weighted Effect Size = 0.79 Published Standardized Norm-Referenced and Researcher-Designed Tests Combined (Based on 4 Studies)

Teaching students how words are spelled provides them with schemata about specific connections between letters and sounds, making it easier for them to identify and remember words in text containing these connections (Ehri, 1987; Moats, 2005/2006). The practice of putting smaller units of writing together in order to create more complex ones—from letters to words or words to sentences—should result in greater skill in understanding of these units in reading (Ehri, 2000; Neville and Searls, 1991).

In three of the four studies examining the impact of writing instruction on reading fluency, spelling skills were taught. In the other study, students were taught how to write more sophisticated sentences by combining simpler sentences into more complex ones. The overall effect size for these studies combined both standardized tests (two studies) and researcher-designed tests (two studies).

Writing instruction had a strong and consistent impact on improving students' reading fluency. *All* of the studies yielded a positive outcome. With one exception, the control condition was reading instruction. When the exception was eliminated, the average weighted effect size rose to 0.87. (Note that the studies reviewed all involved students in grades 1–7. Consequently, the impact of writing instruction on the reading fluency of older students is not known.)

Teach Spelling Skills (Improves Word Reading Skills)

Average Weighted Effect Size = 0.68 Published Standardized Norm-Referenced and Researcher-Designed Tests Combined (Based on 5 Studies)

As noted above, teaching students how to spell theoretically makes it easier for them to identify and remember words in text (Ehri, 1987; Moats, 2005/2006). More explicitly, spelling and word reading rely on the same underlying knowledge, and therefore instruction and practice in one should aid development of the other (Ehri, 2000; Snow, Griffin, and Burns, 2005).

Spelling instruction had a moderate and consistent impact on improving students' word reading skills. The five studies examining the impact of writing instruction on word reading skills all involved spelling instruction. The overall effect size for these studies combined both standardized tests (two studies) and researcher-designed tests (three studies). All of the studies yielded a positive outcome. These findings support the claim that learning to spell supports reading (Graham, 2000; Moats, 2005/2006).

With one exception, the control condition was reading or reading instruction. Notably, when the exception was eliminated, the average weighted effect size rose to 0.77. (Because all studies involved students in grades 1–5, we cannot generalize the findings to older students.)

III. INCREASE HOW MUCH STUDENTS WRITE

Average Weighted Effect Size = 0.30 Published Standardized Norm-Referenced Tests (Based on 6 Studies)

Reading and writing are communication activities, and writers can gain insights about reading by creating a text for an audience to read, even when the student is the intended audience (Nelson and Calfee, 1998). The process of creating a text prompts students to be more thoughtful and engaged when reading text produced by others. By writing, students learn to make their assumptions and premises explicit as well as observe the rules of logic when composing a text (Applebee, 1984), making them more aware of such issues in the material they read. Finally, writing involves generating meaning by using experience and knowledge to create a text and build relationships among words, sentences, and paragraphs (Wittrock, 1990).

According to the data we reviewed, increasing how much students write does in fact improve how well they read. The average weighted effect size on published standardized norm-referenced tests was small in all the studies we reviewed, but still consistently positive, as all studies yielded positive outcomes. The control condition in each of these experiments was either reading or reading instruction. Activities for increasing the amount of writing in the studies reviewed included writing about self-selected topics or topics chosen in collaboration with peers, setting aside fifteen extra minutes a day for sustained writing, using the Internet to write to pen pals, writing journal entries about daily experiences, interacting with others using a dialogue journal, and writing short passages using inference words. (Since all of the studies we reviewed involved students in grades 1–6, this finding cannot be generalized to older students.)

INCREASING STUDENTS' WRITING: EXAMPLES

Pen palling is a method in which two or more writers dialogue with each other about topics of interest. This can involve a younger student writing to an older student and vice versa.

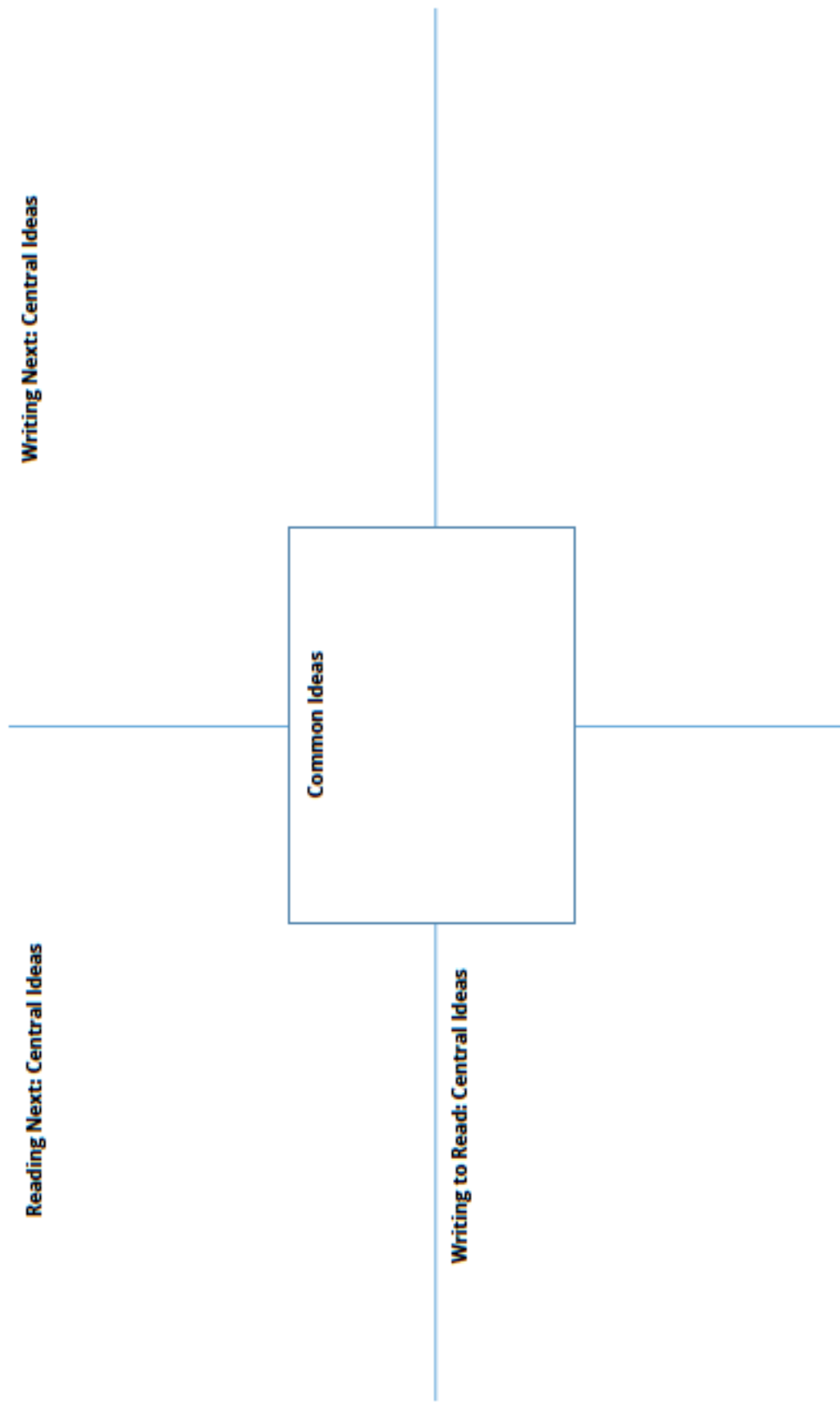
Source: Dana, Scheffler, Richmond, Smith, and Draper (1991).

Daily writing about self-selected topics allows students to write about any topic of their choice. This can be done as a journal activity where the teacher reads and responds to something written by the student in a journal (without editing or correcting). Students sharing their writing with the teacher becomes optional over time.

Source: Peters (1991).

An average weighted effect size of 0.30 on published standardized norm-referenced tests compares favorably with effects obtained by other researchers examining the impact of specific approaches to teaching reading. It exceeded the overall effect of 0.17 for a range of reading programs studied by Slavin et al. (2008) as well as the effect of 0.10 for vocabulary instruction obtained by Elleman et al. (2009), and was equivalent to the effect of 0.32 obtained by Rosenshine and Meister (1994) for reciprocal teaching of comprehension strategies.

From Research to Practice



Text Complexity: Qualitative Measures

Qualitative Dimension	Low Levels of Complexity	High Levels of Complexity
Level or Meaning or Purpose	Single level of meaning Explicitly stated purpose	Multiple levels of meaning Implicit, hidden purpose
Structure	Simple Explicit Conventional Chronological Order	Complex Implicit Unconventional Out of chronological order
Language Conventionality and Clarity	Literal Clear Contemporary, familiar	Figurative or ironic Ambitious or purposefully misleading Archaic
Knowledge Demands: Life Experiences	Simple themes Single theme Common, everyday experiences or clearly fantastical Single perspective Perspective like one's own	Complex, sophisticated themes Multiple themes Experiences distinctly different from one's own Multiple perspectives Perspective unlike or in opposition to one's own
Knowledge Demands: Cultural/Literary Knowledge	Everyday knowledge and familiarity with genre conventions required	Cultural and literary knowledge useful

Text Complexity Analysis of



_____ (title)
by _____ (author)

Recommended Complexity Band:

Qualitative Measures

Meaning/Purpose: (Briefly explain the levels of meaning [Literary Text] or purpose [Informational Text].)

Text Structure: (Briefly describe the structure, organization, and other features of the text.)

Language Features: (Briefly describe the conventions and clarity of the language used in the text, including the complexity of the vocabulary and sentence structures.)

Knowledge Demands: (Briefly describe the knowledge demands the text requires of students.)

Recommended Placement

Briefly explain the recommended placement of the text in a particular grade band.

Text Description:

Briefly describe the text:

Quantitative Description:

Complexity Band Level (provide range):

Lexile or Other Quantitative Measure of the Text:

Considerations for Reader and Task

Below are factors to consider with respect to the reader and task (See attached guiding questions to assist each teacher in filling out this section for his or her own class):

Potential Challenges this Text Poses:

Major Instructional Areas of Focus (3–4 curriculum standards) for this Text:

Differentiation/Supports for Students:

Tab 4

Module Four:

Social Studies

On Tab, write “Social Stuides”

Key Question:

How do the literacy shifts in the new social studies expectations impact instructional practice?

Teacher Training Top Take-Aways (Social Studies)

These are the areas where teachers are concentrating their learning efforts during their summer training. These will also be the most important components of the redelivery and support approach at your building and will constitute the major “look for” areas in your classroom observations during the 2015-16 school year:

- The increased emphasis on social studies as a content area reading course means that social studies teachers will need to provide students with **scaffolding and literacy strategies** to ensure improved informational literacy.
- Teachers need to provide increased exposure to **primary sources**.
- Scaffolding with reading needs to move from teacher chunking to student chunking of texts, emphasizing strategies for understanding **difficult vocabulary and complex text structures**.
- An emphasis needs to be placed on how to **read and write as a historian**.

“Reading and writing to sources must be emphasized.”

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POW TREE+ C

Task Sheet: POW TREE+ C

POW TREE+ C Graphic Organizer

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Civics Legislation and Project Based Learning

Tennessee Code

Module 4: Takeaways

Module 4: Reflections



Module 4 Planning for the New Rigor

Module 4: Rationale, Goals, Session Activities

Task Sheet: SRSD Writing

POW TREE+C

Task Sheet: POW Tree+C

POW TREE+C Graphic Organizer

Task Sheet: Performance Level Descriptors

Civics Legislation and Project Based Learning

Tennessee Code

Module 4: Takeaways

Module 4: Reflections

Two Treatises on Government by John Locke

Chapter II Of The State Of Nature

Sect. 4. To understand political power right, and derive it from its original, we must consider, what state all men are naturally in, and that is, a state of perfect freedom to order their actions, and dispose of their possessions and persons, as they think fit, within the bounds of the law of nature, without asking leave, or depending upon the will of any other man.

Sect. 6. But though this be a state of liberty, yet it is not a state of licence...the state of nature has a law of nature to govern it, which obliges every one: and reason, which is that law, teaches all mankind...that being all equal and independent, no one ought to harm another in his life, health, liberty, or possessions: for men being all the workmanship of one omnipotent, and infinitely wise maker; all the servants of one sovereign master, sent into the world by his order, and about his business; they are his property, whose workmanship they are, made to last during his, not one another's pleasure: Every one...ought...to preserve the rest of mankind, and may not, unless it be to do justice on an offender, take away, or impair the life, or what tends to the preservation of the life, the liberty, health, limb, or goods of another.

Sect. 123 & 124. IF man in the state of nature be so free, as has been said; if he be absolute lord of his own person and possessions, equal to the greatest, and subject to no body, why will he part with his freedom?...To which it is obvious to answer, that though in the state of nature he hath such a right, yet the enjoyment of it is very uncertain, and constantly exposed to the invasion of others... the enjoyment of the property he has in this state is very unsafe, very insecure. This makes him willing ...to join in society with others, who are already united, or have a mind to unite, for the mutual *preservation* of their lives, liberties and estates, which I call by the general name, *property*... The great and chief end, therefore, of men's uniting into commonwealths, and putting themselves under government, is the *preservation of their property*. To which in the state of nature there are many things wanting.

Sect. 127. Thus mankind, notwithstanding all the privileges of the state of nature... are quickly driven into society...The inconveniencies that they are therein exposed to, by the irregular and uncertain exercise of the power every man has of punishing the transgressions of others, make them take sanctuary under the established laws of government, and therein seek *the preservation of their property*. It is this makes them so willingly give up every one his single power of punishing, to be exercised by such alone, as shall be appointed to it

amongst them; and by such rules as the community, or those authorized by them to that purpose, shall agree on. And in this we have the original *right and rise of both the legislative and executive power*, as well as of the governments and societies themselves.

- Excerpts from "Two Treatises of Government"
Retrieved from

Google Books (Accessed on March 21, 2015)

Franklin Roosevelt's "First Inaugural Address"

President Hoover, Mr. Chief Justice, my friends:

This is a day of national consecration. I am certain that my fellow Americans expect that on my induction into the Presidency I will address them with a candor and a decision which the present situation of our Nation impels. This is preeminently the time to speak the truth, the whole truth, frankly and boldly. Nor need we shrink from honestly facing conditions in our country today. This great Nation will endure as it has endured, will revive and will prosper. So, first of all, let me assert my firm belief that the only thing we have to fear is fear itself—nameless, unreasoning, unjustified terror which paralyzes needed efforts to convert retreat into advance. In every dark hour of our national life a leadership of frankness and vigor has met with that understanding and support of the people themselves which is essential to victory. I am convinced that you will again give that support to leadership in these critical days.

In such a spirit on my part and on yours we face our common difficulties. They concern, thank God, only material things. Values have shrunk to fantastic levels; taxes have risen; our ability to pay has fallen; government of all kinds is faced by serious curtailment of income; the means of exchange are frozen in the currents of trade; the withered leaves of industrial enterprise lie on every side; farmers find no markets for their produce; the savings of many years in thousands of families are gone.

More important, a host of unemployed citizens face the grim problem of existence, and an equally great number toil with little return. Only a foolish optimist can deny the dark realities of the moment.

Yet our distress comes from no failure of substance. We are stricken by no plague of locusts. Compared with the perils which our forefathers conquered because they believed and were not afraid, we have still much to be thankful for. Nature still offers her bounty and human efforts have multiplied it. Plenty is at our doorstep, but a generous use of it languishes in the very sight of the supply. Primarily this is because rulers of the exchange of mankind's goods have failed through their own stubbornness and their own incompetence, have admitted their failure, and have abdicated. Practices of the unscrupulous money changers stand indicted in the court of public opinion, rejected by the hearts and minds of men.

True they have tried, but their efforts have been cast in the pattern of an outworn tradition. Faced by failure of credit they have proposed only the lending of more money. Stripped of the lure of profit by which to induce our people to follow their false leadership, they have resorted to exhortations, pleading tearfully for restored confidence. They know only the rules of a generation of self-seekers. They have no vision, and when there is no vision the people perish.

The money changers have fled from their high seats in the temple of our civilization. We may now restore that temple to the ancient truths. The measure of the restoration lies in the extent to which we apply social values more noble than mere monetary profit.

Happiness lies not in the mere possession of money; it lies in the joy of achievement, in the thrill of creative effort. The joy and moral stimulation of work no longer must be forgotten in the mad chase of evanescent profits. These dark days will be worth all they cost us if they teach us that our true destiny is not to be ministered unto but to minister to ourselves and to our fellow men...

Our greatest primary task is to put people to work. This is no unsolvable problem if we face it wisely and courageously. It can be accomplished in part by direct recruiting by the Government itself, treating the task as we would treat the emergency of a war, but at the same time, through this employment, accomplishing greatly needed projects to stimulate and reorganize the use of our natural resources...

It is to be hoped that the normal balance of Executive and legislative authority may be wholly adequate to meet the unprecedented task before us. But it may be that an unprecedented demand and need for undelayed action may call for temporary departure from that normal balance of public procedure.

I am prepared under my constitutional duty to recommend the measures that a stricken Nation in the midst of a stricken world may require. These measures, or such other measures as the Congress may build out of its experience and wisdom, I shall seek, within my constitutional authority, to bring to speedy adoption.

But in the event that the Congress shall fail to take one of these two courses, and in the event that the national emergency is still critical, I shall not evade the clear course of duty that will then confront me. I shall ask the Congress for the one remaining instrument to meet the crisis—broad Executive power to wage a war against the emergency, as great as the power that would be given to me if we were in fact invaded by a foreign foe...

We do not distrust the future of essential democracy. The people of the United States have not failed. In their need they have registered a mandate that they want direct, vigorous action. They have asked for discipline and direction under leadership. They have made me the present instrument of their wishes. In the spirit of the gift I take it.

- "First Inaugural Address"

Retrieved from

<http://www.presidency.ucsb.edu/ws/index.php?id=14473> (Accessed on March 20, 2015).

7th Grade Extended Response Practice Prompt

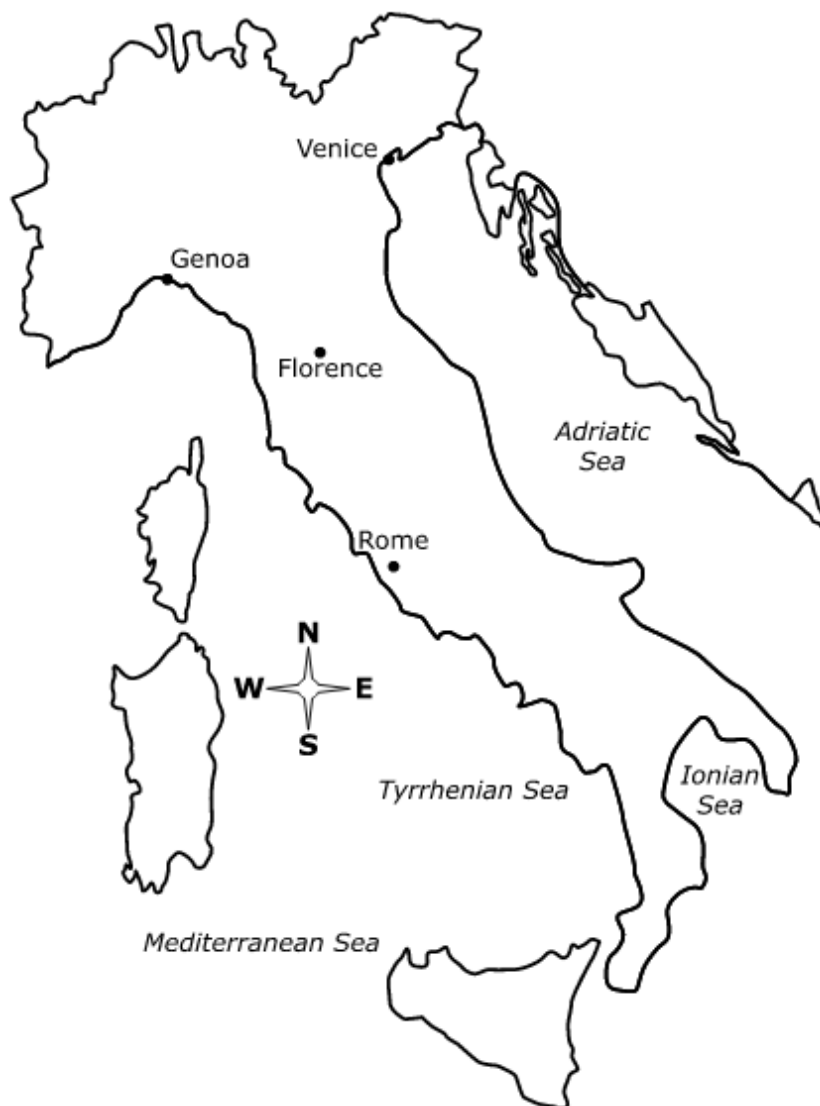
GRADE 7 SOCIAL STUDIES PRACTICE TEST / SECTION 2 / 1 OF 1

The map and the excerpt below are about the first head of the Medici family of the Italian city-state of Florence.

Explain how the location, political system, and economies of the Italian city-states were different from those towns and cities in other parts of Europe.

- How do those differences help explain why the Renaissance started in the Italian city-states instead of elsewhere in Europe?
- Use evidence from the information provided and your knowledge of world history to support your answer.

Florence and the Other Italian City-States, ca. 1500



It is difficult to recognize Cosimo de' Medici as a statesman. . . . For it may seem to us no great achievement for a man to make himself master of a little city-state, with a few thousand inhabitants. . . .

. . . Florence was far more independent . . . than the medieval . . . towns. . . . And Florence was more than a state, she was even in miniature an empire. since she ruled over several subject towns. . . .

Florence, too, was a commercial state; the possession of land was . . . the least important part, of wealth. . . .

The political conditions in which Cosima had to work were largely those of modern, not of medieval politics. . . . The position of the Pope was hardly distinguished from that of the head of a secular state; feudalism had ceased to be a force in politics.

— *Cosimo de' Medici*, Katherine Dorothea Ewart Vernon, 1899

Source: Public Domain

The passage below discusses information from a book by Niccolò Machiavelli on the history of Florence.

Lorenzo de' Medici deserves much of the credit for making Florence a leading city of the Italian peninsula. He devoted himself to the development of the city and of his own family. For the city, he used the abundant vacant land to lay out new streets and line them with houses. Under his direction, the city was enlarged and beautified. His concern for the recent wars in which Florence was involved led him to fortify the castle of Firenzuola. He undertook this effort to assure greater quiet and security. The improved fortress would be able to resist and combat its enemies at a greater distance from the city. He also began the restoration of the Poggio Imperiale in the mountains towards Bologna in the direction of Siena. It too was fortified in the latest designs of the time.

In peaceful times, de' Medici was a great patron of anyone that excelled in any art, as well as of scholars and of learning. He sponsored activities to entertain the citizenry and keep them united. Festivals that included jousts, archery, and feats of bravery from earlier times became popular among the people. He worked to maintain the growing economy of the city and to honor nobility and the wealthy. In short, he worked tirelessly to promote Florence and its citizens.

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7th Grade Extended Response Exemplar

The Italian city-states were ruled by wealthy merchant families like the Medici. Their source of political power was their immense wealth from banking and controlling long-distance trade. The location of the leading city-states on key water routes gave them access to important trade routes. This location gave them connections throughout Europe and beyond. The wealth from trade allowed them to hire standing armies to protect their territory. They also collected taxes, which helped them improve the city and pay for the army and the bureaucrats that ran the city.

This situation was different from the structure in the rest of Europe where feudalism was still in force. Under feudalism, warrior families ruled. Their political power was based on ownership of all the land and their military prowess. In the feudal political system, peasants owed allegiance to the nobles. They “paid” a portion of the crops they grew on the nobles’ land in exchange for military protection. The few towns that existed under the feudal system were much smaller and owed their existence to the nobles that ruled the countryside.

The economy in the Italian city-states was more prosperous than the economy under feudalism. It was an urban commercial economy based on long-distance trade, which was far more profitable than the small-scale peasant farming associated with the feudal system. Merchants sold goods imported throughout the continent. This process made the economy money-based rather than a bartering economy. Accumulating and using money made the influence of the Italian leaders far-reaching.

The Renaissance likely started in the Italian city-states because their political and economic systems were more efficient than those of the rest of Europe, which was still under feudalism. The resulting stability and wealth made them prosperous enough to provide patronage for the artists and thinkers that started the Renaissance. In many cases, they attracted artists and thinkers from Europe and beyond. Additionally, the worldly patrons encouraged a spirit of creation and discovery.

US History Extended Response Practice Prompt

2015 EOC US HISTORY PRACTICE TEST / SECTION 2 / 1 OF 1

The excerpts below address the presidential election of 2000, the 14th Amendment of the Constitution, and the Supreme Court decision in *Bush v. Gore*. The table below contains the 2000 presidential election results.

Explain the Supreme Court decision that decided the 2000 election.

- Why did the case revolve around voting rights and the Equal Protection clause?
- How did the decision impact future elections?
- Use evidence from these sources and your content knowledge to support your answer.

Florida also discounted 175,000 improperly cast ballots, which came disproportionately from African-American districts. Outdated equipment and poorly designed ballots were faulted. Some counties in Florida used new optical-scan machines, while others used decades-old punch cards, lever machines, and paper ballots. Confusing “butterfly” or “caterpillar” ballots—where names of candidates were listed on multiple pages—also made it hard for people to be sure they had voted for the candidate of their choice. Some ballots were disqualified for “overvotes,” selecting too many candidates, while others had incomplete punches such as dimples and “hanging chads.” The automatic recount did not re-evaluate the discounted ballots, and on November 26, the Florida Secretary of State certified that Bush had won the state by 537 votes. Bush accepted the results and appointed a transition team. Gore demanded a hand count. The election was not yet over.

Working on a laptop computer out of the Vice President’s mansion, Gore gathered the latest political reports and plotted his legal and political strategy. *Gore v. Harris* went to the Florida State Supreme Court, which ruled unanimously in Gore’s favor for a full statewide review of all the “undercounted” ballots. Bush’s attorneys appealed to the U.S. Supreme Court, which on December 12, ruled 5 to 4, in *Bush v. Gore*, that insufficient time remained to conduct a recount that would not violate the equal protection clause of the Constitution.

Source: Public Domain/U.S. Senate

14th Amendment

Section 1

All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States, and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law, nor deny to any person within the jurisdiction the equal protection of the laws

Source: Public Domain/U.S. National Archives and Records Administration

Having once granted the right to vote on equal terms, the state may not, by later arbitrary and disparate treatment, value one person's vote over another.

Source: Public Domain/U.S. House of Representatives

2000 Electoral Votes

	George W. Bush Republican	Al Gore Jr. Democrat
Popular vote	50,456,062	50,996,582
Electoral vote	271	266
Florida popular vote	2,912,790	2,912,253
Florida electoral votes	25	0

Source: Public Domain/U.S. National Archives and Records Administration

TN SS Constructed Response Rubric Grades 6-7

Score	Social Studies Content	Literacy in Social Studies
4	<p>The student response:</p> <ul style="list-style-type: none"> • Demonstrates a thorough understanding of the knowledge and skills related to the development of societies and civilizations. This level of understanding is demonstrated through a clear, focused explanation and thoughtful analysis. • Demonstrates a comprehensive, focused understanding of the content strand(s)—geography, culture, economics, politics, history, and Tennessee connection—referenced in the question. • Demonstrates a strong understanding of the historical period referenced in the question. • Addresses all aspects of the question. • Cites evidence from the stimulus (or stimuli) to support all facets of the response. • May contain minor content errors that do not reflect a misunderstanding of primary social studies concepts. 	<p>The student response:</p> <ul style="list-style-type: none"> • Focuses on topics or makes claims directly related to the question. • Introduces the topic or claim with accuracy and clarity. • Develops the topic or claim with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. • Creates cohesion and clarity of relationships among ideas and concepts. • Utilizes appropriate social studies terminology correctly to inform about or explain the topic. • Establishes and maintains an objective tone. • Provides a conclusion that follows from and supports the information or explanation presented. • Produces information appropriate for the task, purpose, and audience. • May contain minor errors in grammar and mechanics, but these errors do not detract from overall comprehensibility.
3	<p>The student response:</p> <ul style="list-style-type: none"> • Demonstrates an understanding of the knowledge and skills related to the development of societies and civilizations. This level of understanding is demonstrated through adequate explanation and analysis. • Demonstrates a general understanding of the content strand(s)—geography, culture, economics, politics, history, and Tennessee connection— 	<p>The student response:</p> <ul style="list-style-type: none"> • Focuses on topics or makes claims generally related to the question. • Introduces the topic or claim with adequate clarity. • Develops the topic or claim with some relevant facts, definitions, details, quotations, or other information and examples. • Identifies relationships among ideas and concepts. • Misuses some social studies terminology, creating minor

	<p>referenced in the question.</p> <ul style="list-style-type: none"> • Demonstrates an understanding of the historical period referenced in the question. • Addresses many aspects of the question. • Cites evidence from the stimulus (or stimuli) to support some facets of the response. • May include content errors that indicate a minor misunderstanding of primary social studies concepts. 	<p>flaws in the information or explanation of the topic.</p> <ul style="list-style-type: none"> • Establishes and maintains an objective tone. • Provides a conclusion that offers some support for the information or explanation presented. • Produces information generally appropriate for the task, purpose, and audience. • May contain a few errors in grammar and mechanics, but these errors detract little from overall comprehensibility.
2	<p>The student response:</p> <ul style="list-style-type: none"> • Demonstrates a limited understanding of some of the knowledge and skills related to the development of societies and civilizations, but the explanation lacks depth and detail and the analysis lacks focus and clarity. • Demonstrates a partial understanding of the content strand(s)—geography, culture, society, economics, politics, and Tennessee connection—referenced in the question. • Demonstrates a partial understanding of the historical period referenced in the question. • Addresses few aspects of the question. • Cites little evidence from the stimulus (or stimuli) to support the response. • May arrive at an acceptable conclusion, but the response might be incomplete, contain content errors, or misuse social studies terminology. 	<p>The student response:</p> <ul style="list-style-type: none"> • Focuses on topics or makes claims partially related to the question. • Introduces the topic or claim, but with limited clarity. • Develops the topic or claim with some inadequate support of facts, definitions, details, quotations, or other information and examples. • Describes some of the relationships among ideas and concepts. • Misuses social studies terminology. • Establishes an objective tone, but introduces some unsupported conjectures. • Provides a conclusion with little support for the information or explanation presented. • Produces some information inappropriate for the task, purpose, or audience. • May contain errors in grammar and mechanics that partially detract from overall comprehensibility.
1	<p>The student response:</p> <ul style="list-style-type: none"> • Demonstrates little to no understanding of the knowledge and skills related to the development of societies and civilizations. • Demonstrates little or no understanding of the content strand(s)—geography, culture, society, economics, politics, and Tennessee connection—referenced in the question. 	<p>The student response:</p> <ul style="list-style-type: none"> • Focuses on topics or makes claims unrelated to the question. • Fails to introduce the topic or claim or introduction lacks clarity. • Develops the topic or claim with little or no support of facts, definitions, details, quotations, or other information and examples.

	<ul style="list-style-type: none"> • Demonstrates little or no understanding of the historical period referenced in the question. • May address some of the elements of the question, but the conclusions are inadequate or inaccurate. • May contain many content errors, flaws in reasoning, or misuse social studies terminology. 	<ul style="list-style-type: none"> • Fails to describe relationships among ideas and concepts. • Misuses social studies terminology. • Fails to establish and maintain an objective tone, introducing opinions and unsupported conjectures. • Fails to provide a conclusion that contains support for the information or explanation presented. • Produces information inappropriate for the task, purpose, or audience. • Contain errors in grammar and mechanics that detract from overall comprehensibility.
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TN SS Constructed Response Rubric Grade 8 - U.S. History

Score	Social Studies Content	Literacy in Social Studies
4	<p>The student response:</p> <ul style="list-style-type: none"> • Demonstrates historical awareness, such as an understanding of chronological placement, historical trends, and historical decision-making, through clear, focused explanations and thoughtful analysis. • Demonstrates a comprehensive, focused understanding of the content strand(s)—geography, culture, economics, politics, history, and Tennessee connection—referenced in the question. • Addresses all aspects of the question. • Cites evidence from the stimulus (or stimuli) to support all facets of the response. • Consistently exhibits proper use of historical data related to the question, such as comparing and contrasting information, explaining cause-and-effect relationships, and supporting inferences or conclusions. • May include minor content errors that do not reflect a misunderstanding of primary social studies concepts. 	<p>The student response:</p> <ul style="list-style-type: none"> • Focuses on topics or makes claims directly related to the question. • Introduces the topic or claim with accuracy and clarity. • Provides an analysis of the topic or claim consistently using relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. • Creates cohesion and clarity of relationships among ideas and concepts. • Utilizes appropriate social studies terminology to inform about or explain the topic. • Establishes and maintains an objective tone. • Provides a conclusion that follows from and is supported by the information or explanation presented. • May contain minor errors in grammar and mechanics that do not detract from overall comprehensibility.
3	<p>The student response:</p> <ul style="list-style-type: none"> • Demonstrates historical awareness, such as an understanding of chronological placement, historical trends, and historical decision-making, through adequate explanation and analysis. • Demonstrates a general understanding of the content strand(s)—geography, culture, economics, politics, history, and Tennessee connection— 	<p>The student response:</p> <ul style="list-style-type: none"> • Focuses on topics or makes claims generally related to the question. • Introduces the topic or claim with adequate clarity. • Provides an analysis of the topic or claim frequently using relevant facts, definitions, details, or other information and examples. • Identifies relationships among ideas and concepts.

	<p>referenced in the question.</p> <ul style="list-style-type: none"> • Addresses many aspects of the question. • Cites evidence from the stimulus (or stimuli) to support some facets of the response. • Frequently exhibits proper use of historical data related to the question, such as comparing and contrasting information, explaining cause-and-effect relationships, and supporting inferences or predictions. • May include content errors that indicate a minor misunderstanding of primary social studies concepts. 	<ul style="list-style-type: none"> • Misuses some social studies terminology, creating minor flaws in the information or explanation of the topic. • Establishes and maintains an objective tone. • Provides a conclusion that offers some support for the information or explanation presented. • Produces information generally appropriate for the task, purpose, and audience. • May contain a few errors in grammar and mechanics that detract little from overall comprehensibility.
2	<p>The student response:</p> <ul style="list-style-type: none"> • Demonstrates some historical awareness, such as an understanding of chronological placement, historical trends, and historical decision-making, but explanations often lack depth and detail, and analysis lacks focus and clarity. • Demonstrates a partial understanding of the content strand(s)—geography, culture, economics, politics, history, and Tennessee connection—referenced in the question. • Addresses few aspects of the question. • Cites little evidence from the stimulus (or stimuli) to support the response. • Occasionally exhibits proper use of historical data related to the question, such as comparing and contrasting information, explaining cause-and-effect relationships, and supporting inferences or conclusions. • May arrive at an acceptable conclusion, but the response might be incomplete, contain content errors, or misuse social studies terminology. 	<p>The student response:</p> <ul style="list-style-type: none"> • Focuses on topics or makes claims partially related to the question. • Introduces the topic or claim, but with limited clarity. • Provides an analysis of the topic or claim occasionally using adequate support of facts, definitions, details, or other information and examples. • Describes some of the relationships among ideas and concepts. • Misuses social studies terminology. • Establishes an objective tone, but introduces some unsupported conjectures. • Provides a conclusion with little support for the information or explanation presented. • Produces some information inappropriate to the task, purpose, or audience. • May contain errors in grammar and mechanics that partially detract from overall comprehensibility.

<p>1</p>	<p>The student response:</p> <ul style="list-style-type: none"> • Demonstrates little to no historical awareness, such as an understanding of chronological placement, historical trends, and historical decision-making, with explanations that contain little depth and detail, and analysis that has little focus or clarity. • Demonstrates little to no understanding of the content strand(s)—geography, culture, economics, politics, history, and Tennessee connection—referenced in the question. • May address some of the elements of the question, but the conclusions are inadequate or inaccurate. • Rarely exhibits proper use of historical data related to the question, such as comparing and contrasting information, explaining cause-and-effect relationships, and supporting inferences or conclusions. • May contain many content errors, flaws in reasoning, or misuse of social studies terminology. 	<p>The student response:</p> <ul style="list-style-type: none"> • Focuses on topics or makes claims unrelated to the question. • Fails to introduce the topic or claim or introduction lacks clarity. • Provides an analysis of the topic or claim using little or no support of facts, definitions, details, quotations, or other information and examples. • Fails to describe relationships among ideas and concepts. • Misuses social studies terminology. • Fails to establish and maintain an objective tone, introducing opinions and unsupported conjectures. • Fails to provide a conclusion that contains support for the information or explanation presented. • Produces information inappropriate to the task, purpose, or audience. • Contains errors in grammar and mechanics that detract from overall comprehensibility.
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7th Grade Practice Test Items

GRADE 7 SOCIAL STUDIES PRACTICE TEST / SECTION 1 / 1 OF 59

The photograph below shows a building in India in the 17th century.

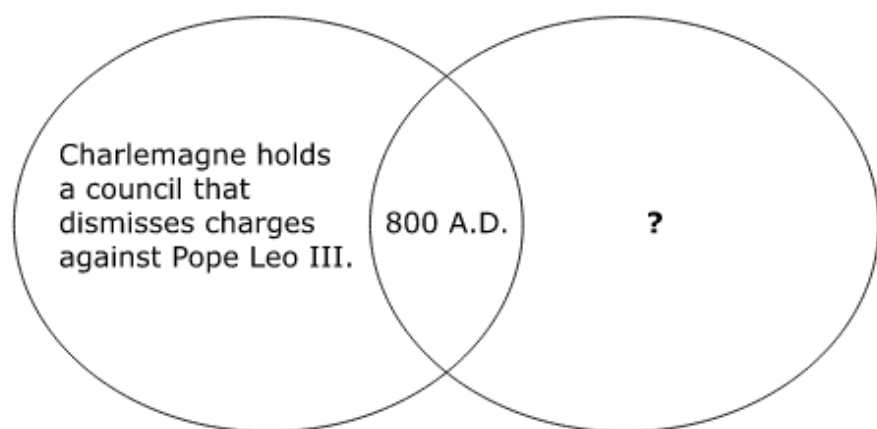


Source: Public Domain/U.S. National Library of Medicine

Which statement identifies an important feature of the building in the photograph?

- ☐ A. It was the tallest building in the world when completed.
- ☐ B. It contained style elements from several cultures.
- ☐ C. It was built with materials from all over the world.
- ☐ D. It was constructed in less than two years.

The diagram contains information about the Papacy and European rulers.



Which statement completes the diagram?

- ☐ A. Charlemagne unites the Roman Papacy with the Byzantine Empire.
- ☐ B. Charlemagne becomes protector of the Roman Pope.
- ☐ C. Pope Leo III makes Charlemagne a cardinal.
- ☐ D. Pope Leo III crowns Charlemagne emperor.

The information below relates to the historical development of West Africa.

One of the main aspects of the development of West African kingdoms was the emergence of cities. The first city, Koumbi Saleh, grew on the edge of the Sahara where the Kingdom of Ghana developed around it. Further inland, three bustling centers emerged along the Niger River: Djenné, Timbuktu, and Gao. These cities were the major sites of trading activity in the Malian Empire. Gao eventually broke from a declining Mali and created the Songhai Empire.

Which conclusion is supported by the information and your knowledge of West Africa?

- ☐ A. Outside influences caused cities to decline.
- ☐ B. Exhaustion of resources forced cities to change.
- ☐ C. Trading centers promoted regional development.
- ☐ D. Conflicts among cities hindered cultural advancement.

Which effect did the bubonic plague have on European life during the Middle Ages?

- ☐ A. It caused a peasant labor shortage that disrupted feudal society.
- ☐ B. It encouraged many people to move to colonies across the oceans.
- ☐ C. It prompted the start of modern medical techniques that have cured diseases.
- ☐ D. It changed the structure of medieval society because it targeted the upper classes.

The excerpt below contains a statement from an important Enlightenment thinker.

The inconveniencies that they are therein exposed to by the irregular and uncertain exercise of the power every man has of punishing the transgressions of others, make them take sanctuary under the established laws of government, and therein *seek the preservation of their property*. It is this makes them so willingly give up every one his single power of punishing. . . . And in this we have the original *right and rise of both the legislative and executive power*, as well as of the governments and societies themselves.

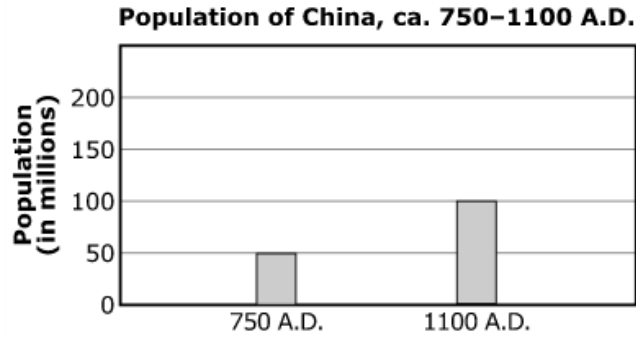
—John Locke, *Second Treatise of Government*, 1689

Source: Public Domain

Which sentence states the point of this excerpt?

- ☐ A. People punish others wrongly without laws.
- ☐ B. People organize governments to gain protection.
- ☐ C. Governments require legislative and executive power.
- ☐ D. Governments and societies exist for different reasons.

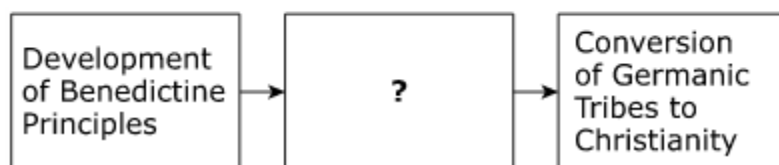
The graph below illustrates a demographic change in China during the period of the Song Dynasty.



Which statement offers an explanation for how the Song Dynasty contributed to the change shown on the graph?

- ☐ A. Expanding territorial control to the Korean Peninsula increased the population of China significantly.
- ☐ B. Improving agricultural techniques with irrigation and more productive strains of rice increased food supplies.
- ☐ C. Adopting government policies that led to respect for the family and ancestors resulted in increased birthrates.
- ☐ D. Adopting government policies that encouraged immigration from Central Asia caused people to move to China.

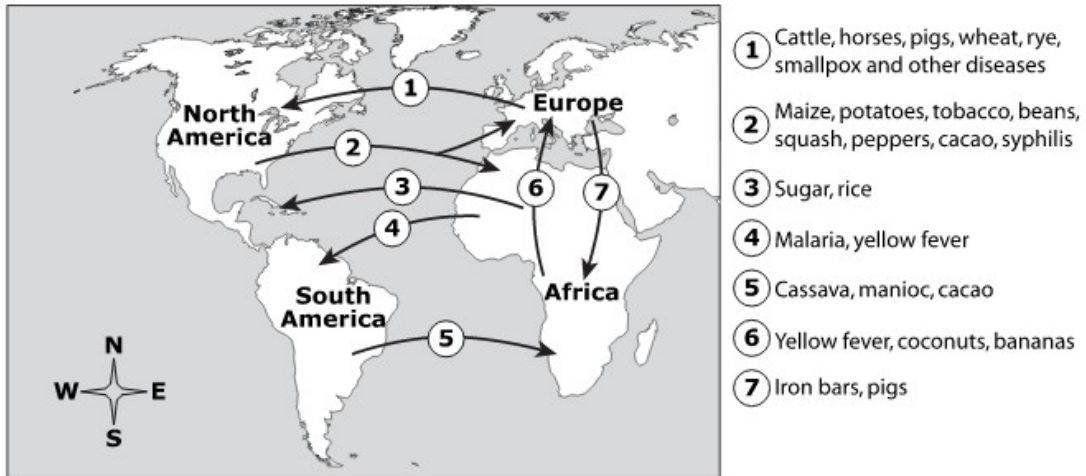
The diagram below describes a series of events related to the spread of Christianity.



Which statement completes the diagram?

- ☐ A. Spread of Monastic Orders
- ☐ B. Establishing of Monastic Vows
- ☐ C. Monastic Rules Written by Benedict
- ☐ D. Kings Encourage Monastic Recruitment

The map below illustrates the Columbian Exchange.



Which statement describes a result for native civilizations in the exchanges of animals shown on the map?

- ☐ A. It altered their warfare, enabling them to stop white settlers from claiming tribal land.
- ☐ B. It made them more mobile, leading them to develop new tribal traditions.
- ☐ C. It caused a decline in hunting, forcing most of them to migrate to cities.
- ☐ D. It made farming more efficient, increasing their population.

The excerpt below states two of Martin Luther's 95 Theses.

1. Our Lord and Master Jesus Christ . . . willed that the whole life of believers should be repentance.
2. This word cannot be understood to mean sacramental penance, i.e., confession and satisfaction, which is administered by the priests.

—Martin Luther, Disputation of Doctor Martin Luther on
the Power and Efficacy of Indulgences (95 Theses), 1517

Source: Public Domain

Based on the excerpt and your knowledge of the “95 Theses,” which practice of the Catholic Church did Martin Luther challenge with these two “theses”?

- ☐ A. that salvation from sin will be granted by clergy through showing evidence of regret
- ☐ B. that punishment for sin can be avoided by donating money for good causes
- ☐ C. that people can be banished from the faith by religious leaders
- ☐ D. that people can have salvation restored by the pope

The photograph below shows a sculpture over the doors of the House of Representatives Chamber at the U.S. Capitol.



Source: Public Domain/Library of Congress

Based on the photograph and your knowledge of ancient Rome, which statement explains why this sculpture is included at the U.S. Capitol?

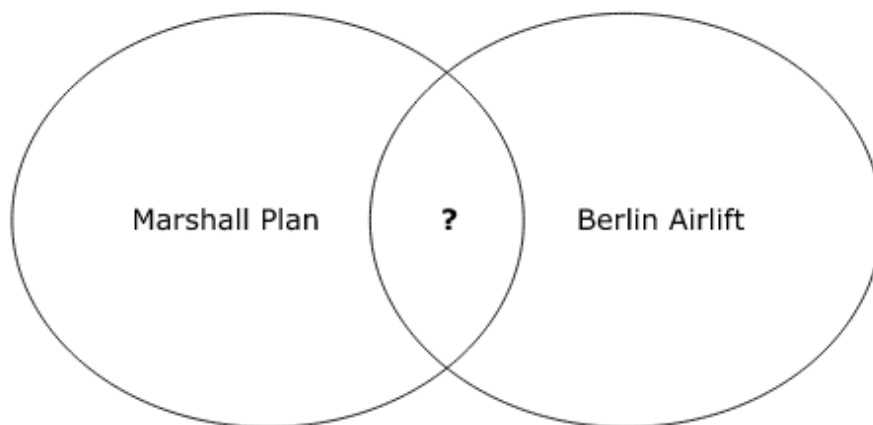
- ☐ A. It illustrates the role of the Byzantine Empire in preserving the principles of Roman law.
- ☐ B. It illustrates an impact of the Roman emperor Constantine's decision to convert to Christianity.
- ☐ C. It illustrates the Byzantine Empire's role in preserving the government of the Roman Republic.
- ☐ D. It illustrates the impact of Roman civilization on the architectural development of Western civilization.

US History Practice Test Items

2015 EOC US HISTORY PRACTICE TEST / SECTION 1 / 7 OF 60

The Venn diagram shows two events related to the end of World War II.

Events in Post-World War II Europe



Which statement completes the diagram?

- ☐ A. a response to war-related crimes
- ☐ B. intended to pay for war-related damage
- ☐ C. a response to the Soviet Union's expansionist actions
- ☐ D. intended to revive West Germany's capitalist economy

The illustration below is used by the Federal Deposit Insurance Corporation (FDIC).



Source: Public Domain/Federal Deposit Insurance Corporation

Based on your content knowledge, which event is most directly related to the message in this illustration?

- ☐ A. the passage of the Civil Rights Act of 1964, because it banned discrimination applying to public accommodations
- ☐ B. the passage of the Civil Rights Act of 1968, because it outlawed efforts to maintain segregated neighborhoods
- ☐ C. the ratification of the 26th Amendment, because it expanded political participation to include more people
- ☐ D. the ratification of the 24th Amendment, because it removed an economic barrier to political participation

The passage below is about a telegram that was sent to the United States during World War II.

In 1942, a telegram was sent to London and New York by Gerhart Riegner, a World Jewish Congress representative. The telegram centered on a secret report from Adolf Hitler's Headquarters. It claimed that all Jewish people in Germany and German-occupied countries, approximately 3½ to 4 million people, were to be deported and exterminated at camps in the east. It stated that the Nazi regime believed this to be the answer to the "Jewish Question" in Europe.

Why did the United States fail to take immediate action in response to this telegram?

- ☐ A. Government officials initially doubted the credibility of the information.
- ☐ B. Government officials did not want the country to be drawn into the war.
- ☐ C. Government officials did not have the resources to address the situation.
- ☐ D. Government officials initially feared the public reaction to further intervention.

The list below describes a famous early 20th-century activist.

- led the American Railway Union
- ran for U.S. president five times as the Socialist Party nominee
- cofounded the Industrial Workers of the World

Which activist does this list describe?

- ☐ A. William Jennings Bryan
- ☐ B. Samuel Gompers
- ☐ C. Eugene Debs
- ☐ D. Jacob Riis

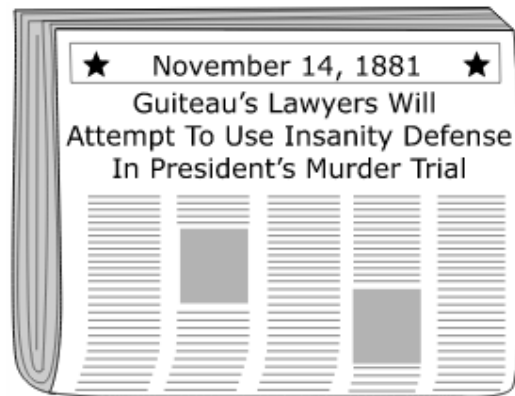
The list below shows developments of the early 20th century.

- postwar instability
- rise of nationalism
- worldwide economic depression
- major advancements in telecommunications
- major advancements in weapons technology

During the 1920s and 1930s, which concern did the U.S. government have about these developments in Europe?

- ☐ A. that citizens would begin to overthrow democratic governments and initiate all forms of anarchy
- ☐ B. that people would begin to support authoritarian leaders who aimed to control all aspects of society
- ☐ C. that leaders would begin to adopt foreign policies designed to isolate their country from other countries.
- ☐ D. that countries would begin to adopt communist governments and isolate their citizens from modern ideas

The headline below refers to an event that occurred during the late 19th century.



Which policy change was influenced by the event referenced in the headline?

- ☐ A. Government regulations were to be enforced to guarantee better working conditions.
- ☐ B. Government workers were to be compensated fairly, not deliberately underpaid.
- ☐ C. Government positions were to be awarded on merit, not political loyalty.
- ☐ D. Government regulations were to be enforced to control railroad rates.

The passage below is about a telegram that was sent to the United States during World War II.

In 1942, a telegram was sent to London and New York by Gerhart Riegner, a World Jewish Congress representative. The telegram centered on a secret report from Adolf Hitler's Headquarters. It claimed that all Jewish people in Germany and German-occupied countries, approximately 3½ to 4 million people, were to be deported and exterminated at camps in the east. It stated that the Nazi regime believed this to be the answer to the "Jewish Question" in Europe.

Why did the United States fail to take immediate action in response to this telegram?

- ☐ A. Government officials initially doubted the credibility of the information.
- ☐ B. Government officials did not want the country to be drawn into the war.
- ☐ C. Government officials did not have the resources to address the situation.
- ☐ D. Government officials initially feared the public reaction to further intervention.

The excerpt below recounts a tragic event during the civil rights movement.

44 years ago, on June 21, 1964, Andrew Goodman, James Chaney, and Michael Schwerner were murdered in Philadelphia, Mississippi, while working in the name of American democracy to register voters and secure civil rights during the summer of 1964, which has become known as "Freedom Summer." . . .

. . . In 1964 . . . most Black voters were disenfranchised by law or practice in Mississippi.

. . . Andrew Goodman, James Chaney, and Michael Schwerner volunteered to work as part of the "Freedom Summer" project that involved several civil rights organizations, including the Mississippi State chapter of the National Association for the Advancement of Colored People, the Southern Christian Leadership Conference, the Student Nonviolent Coordinating Committee, and CORE.

Source: Public Domain/ U.S. Government Printing Office

What did the project mentioned in the excerpt have in common with the Tent Cities of Haywood and Fayette Counties?

- ☐ A. They both led to a decline in social activism.
- ☐ B. They both attempted to reform the judicial system.
- ☐ C. They both attempted to politically empower people.
- ☐ D. They both led to the economic oppression of people.

Which person would most likely have been a "new" immigrant during the late 19th and early 20th centuries?

- ☐ A. a farmer from Sweden
- ☐ B. a Catholic from Italy
- ☐ C. a merchant from England
- ☐ D. a Protestant from Germany

The excerpt below is from a 1947 executive order.

It is of vital importance that persons employed in the Federal service be of complete and unswerving loyalty to the United States. . . .

. . . Although the loyalty of by far the overwhelming majority of all Government employees is beyond question, the presence within the Government service of any disloyal or subversive person constitutes a threat to our democratic processes. . . .

. . . Maximum protection must be afforded the United States against infiltration of disloyal persons into the ranks of its employees. . . .

Therefore, . . . it is hereby, in the interest of the internal management of the Government, ordered as follows:

. . . There shall be a loyalty investigation of every person . . . of any department or agency of the executive branch of the Federal Government.

Source: Public Domain/The American Presidency Project

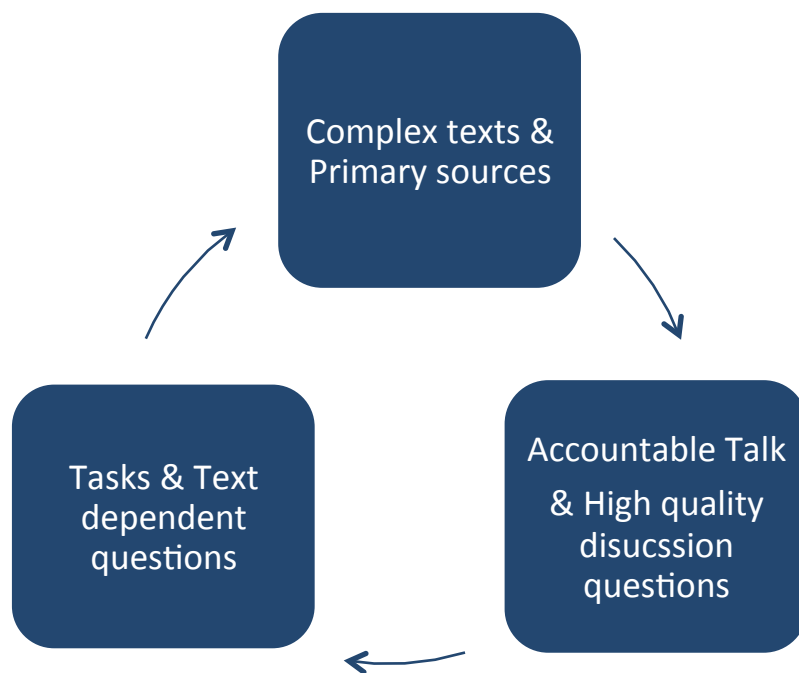
What event directly contributed to the decision to issue this executive order?

- ☐ A. fear of a postwar economic depression
- ☐ B. emergence of the postwar youth culture
- ☐ C. rise of a revolutionary movement in China
- ☐ D. fear of the spread of totalitarianism in Europe

Planning Rigorous Lessons: “The 3 T’s”: Text, Task, Talk

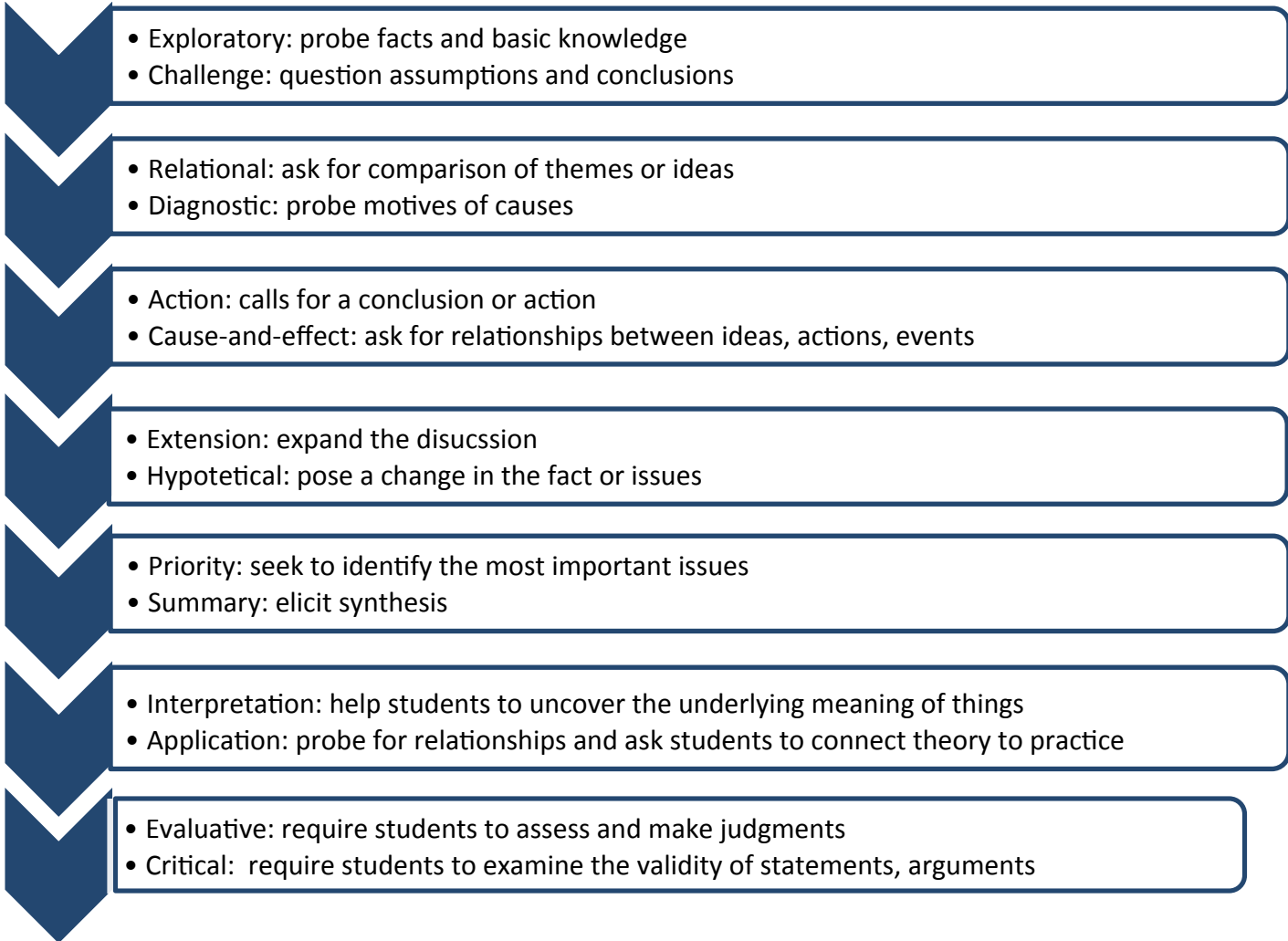
Three components of rigorous social studies lessons:

1. Complex texts and primary sources that are read multiple times for varying purposes.
2. Text-dependent questions and tasks that develop students’ reading, writing, speaking, listening and thinking skills, along with building students’ social studies content knowledge.
3. High quality discussions and Accountable Talk®.



Primary Source Discussion Questions

When planning a primary source lesson it is very helpful to plan your questioning. Balance the types of questions you ask, moving from simple questions to those that require higher order thinking skills. The questions below guide students to examine assumptions, draw conclusions, and make interpretations.

- 
- Exploratory: probe facts and basic knowledge
 - Challenge: question assumptions and conclusions

- Relational: ask for comparison of themes or ideas
- Diagnostic: probe motives of causes

- Action: calls for a conclusion or action
- Cause-and-effect: ask for relationships between ideas, actions, events

- Extension: expand the discussion
- Hypothetical: pose a change in the fact or issues

- Priority: seek to identify the most important issues
- Summary: elicit synthesis

- Interpretation: help students to uncover the underlying meaning of things
- Application: probe for relationships and ask students to connect theory to practice

- Evaluative: require students to assess and make judgments
- Critical: require students to examine the validity of statements, arguments

Sample questions:

Exploratory:	<i>What research evidence supports?</i>
Challenge:	<i>How else might we account for?</i>
Relational:	<i>How does compare to?</i>
Diagnostic:	<i>Why did?</i>
Action:	<i>In response to, what should do?</i>
Cause & effect:	<i>If occurred, what would happen?</i>
Extension:	<i>What are additional ways that?</i>
Hypothetical:	<i>Suppose ....had been the case, would the outcome have been the same?</i>
Priority:	<i>What is the most important?</i>
Summary:	<i>What themes or lessons have emerged from?</i>
Interpretation:	<i>From whose viewpoint/perspective are reading?</i>
Application:	<i>How does this apply to that?</i>
Evaluative:	<i>Which of these are better? Why does it matter? So what?</i>
Critical:	<i>How do we know? What's the evidence? How reliable is the evidence?</i>

Think about:

- How does this relate Bloom's Taxonomy?
- How does this relate to your teacher evaluation model?
- How does this relate to your knowledge of Accountable Talk®?

Tab 5

Module Five:

Mathematics

On Tab, write “Mathematics”

Key Question:

How can leaders focus on supporting teachers to impact student success in mathematics?

Teacher Training Top Take-Aways (Mathematics)

These are the areas where teachers are concentrating their learning efforts during their summer training. These will also be the most important components of the redelivery and support approach at your building and will constitute the major “look for” areas in your classroom observations during the 2015-16 school year:

- Leaders will learn the importance of creating and sustaining a positive **‘math mindset’** by assessing current attitudes and exploring NCTM’s ideas on productive and unproductive beliefs.
- Leaders should always be assessing the effectiveness of the instruction in math classrooms. One tool to help leaders do this is the **NCTM Teaching Practices**. Leaders will reflect on what they consider to be highly effective math teachers, compared to what the Teaching Practices describe.
- The **purposeful and frequent use of mathematics tasks** in the classroom will best prepare our students for the mathematics demands ahead of them.
- There is no decision that teachers make that has a greater impact on students’ opportunities to learn and on their perceptions about what mathematics is than the **selection or creation of the tasks** with which the teacher engages students in studying mathematics.

“Task Predicts Performance.”

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Appendix

Assessing the Current 'Math Mindset'

All of us who are stakeholders have a role to play and important actions to take if we finally are to recognize our critical need for a world where the mathematics education of our students draws from research, is informed by common sense and good judgment, and is driven by a non-negotiable belief that we must develop mathematical understanding and self confidence in all students

NCTM Principles to Action

I don't like to be negative about math because it really teaches you a lot of great things. You kind of use math every day

Madison Davenport

Somehow it's okay for people to chuckle about not being good at math. Yet if I said, 'I never learned to read,' they'd say I was an illiterate dolt.

Neil deGrasse Tyson

If you stop at general math, you're only going to make general math money.

Snoop Dogg

Discussion Activity: What is my 'Math Mindset'?

Instructions: First, complete each question individually. Then, share at your table.

1. What are my personal math biases? Have I ever said 'I'm not good at math'?
2. What 'math mindset' am I hearing in the halls and classrooms from students?
3. What 'math mindset' am I hearing from my math faculty? Non-math Faculty?

PLC Guide: The following is a sample protocol that school-wide or teacher PLC teams might use to promote a positive, productive ‘math mindset’ in the building. This should take approximately 20-30 minutes.

Topic for Discussion: Creating a Positive ‘Math Mindset’

Step 1:	Download the ‘Math Mindset’ PowerPoint from the “For Leaders” section of the TNCore website at www.tncore.org to use as a guide during this PLC.
Step 2:	Download and play the clip from Emily Calandrelli’s ‘I Don’t Do Math’ video from the “For Leaders” section of the TNCore website at www.tncore.org .
Step 3:	At tables, and then as a whole group, discuss the following three questions: <ol style="list-style-type: none"> 1. What are my personal math biases? Have I ever said “I’m not good at math”? 2. What ‘math mindset’ am I hearing in the halls and classrooms from students? 3. What ‘math mindset’ am I hearing from my math faculty? Non-math faculty?
Step 4:	Use the PowerPoint slide to review the ‘Cost of Innumeracy’. Use the partial list to guide discussion on the price students will pay for being math illiterate.
Step 5:	Using the PowerPoint slide as a guide, review the NCTM’s ‘Productive and Unproductive Beliefs’ in regards to mathematics education.
Step 6:	<p>REFLECTION: Using the table from the PowerPoint slides as a guide, allow individual, table, and whole-group discussion on the following:</p> <p>What are the main takeaways from and teacher and leader actions you’d like to see centered around...</p> <ul style="list-style-type: none"> • Current perceptions about math education? • The cost of innumeracy? • NCTM’s ‘Productive and Unproductive Beliefs’ about math education?

Characteristics of high-level math instruction and student engagement

Definition in your own words	Essential Characteristics
Specific Observable Examples	Non-examples

NCTM Mathematics Teaching Practices

NCTM Principles to Actions: Ensuring Mathematical Success for All, 2014

Directions: Read through the Teaching Practices. As you read, UNDERLINE those characteristics that match those on your Frayer Model and CIRCLE those characteristics that were left off your Frayer Model, but should be added.

1. ESTABLISH MATHEMATICS GOALS TO FOCUS LEARNING.

Effective teaching of mathematics establishes clear goals for the mathematics that students are learning, situates goals within learning progressions, and uses the goals to guide instructional decisions.

2. IMPLEMENT TASKS THAT PROMOTE REASONING AND PROBLEM SOLVING.

Effective teaching of mathematics engages students in solving and discussing tasks that promote mathematics reasoning and problem solving and allow multiple entry points and varied solution strategies.

3. USE AND CONNECT MATHEMATICAL REPRESENTATIONS.

Effective teaching of mathematics engages students in making connections among mathematical representations to deepen understanding of mathematics concepts and procedures and as tools for problem solving.

4. FACILITATE MEANINGFUL MATHEMATICAL DISCOURSE.

Effective teaching of mathematics facilitates discourse among students to build shared understanding of mathematical ideas by analyzing and comparing student approaches and arguments.

5. POSE PURPOSEFUL QUESTIONS.

Effective teaching of mathematics uses purposeful questions to assess and advance students' reasoning and sense making about important mathematical ideas and relationships.

6. BUILD PROCEDURAL FLUENCY FROM CONCEPTUAL UNDERSTANDING.

Effective teaching of mathematics builds fluency with procedures on a foundation of conceptual understanding so that students, over time, become skillful in using procedures flexibly as they solve contextual and mathematical problems.

7. SUPPORT PRODUCTIVE STRUGGLE IN LEARNING MATHEMATICS.

Effective teaching of mathematics consistently provides students, individually and collectively, with opportunities and supports to engage in productive struggle as they grapple with mathematical ideas and relationships.

8. ELICIT AND USE EVIDENCE OF STUDENT THINKING.

Effective teaching of mathematics uses evidence of student thinking to assess progress toward mathematical understanding and to adjust instruction continually in ways that support and extend learning.

Assessing and Advancing Questions, Accountable Talk

Assessing and Advancing Student Understanding Rationale

Effective teaching requires being able to support students as they work on challenging tasks without taking over the process of thinking for them (NCTM, 2000). Asking questions that assess student understanding of mathematical ideas, strategies or representations provides teachers with insights into what students know and can do. The insights gained from these questions prepare teachers to then ask questions that advance student understanding of mathematical concepts, strategies or connections between representations. By analyzing students' written responses, teachers will have the opportunity to develop questions to both assess and advance student understanding of mathematical concepts and mathematical practices.

Assessing and Advancing Questions Characteristics

ASSESSING QUESTIONS	ADVANCING QUESTIONS
Are based closely on the work students have produced.	Use what students have produced as a basis for making progress toward the target goal.
Clarify what students have done and what students understand about what they have done.	Move students beyond their current thinking by pressing students to extend what they know to a new situation.
Provide information to the teacher about what students understand.	Press students to think about something they are not currently thinking about.

Accountable Talk Features and Indicators

Accountability to the Learning Community

- Participate actively in classroom talk
- Listen attentively
- Elaborate and build on each other's ideas
- Work to clarify or expand a proposition

Accountability to Knowledge

- Provide specific and accurate knowledge
- Give appropriate evidence for claims and arguments
- Commit to getting it right

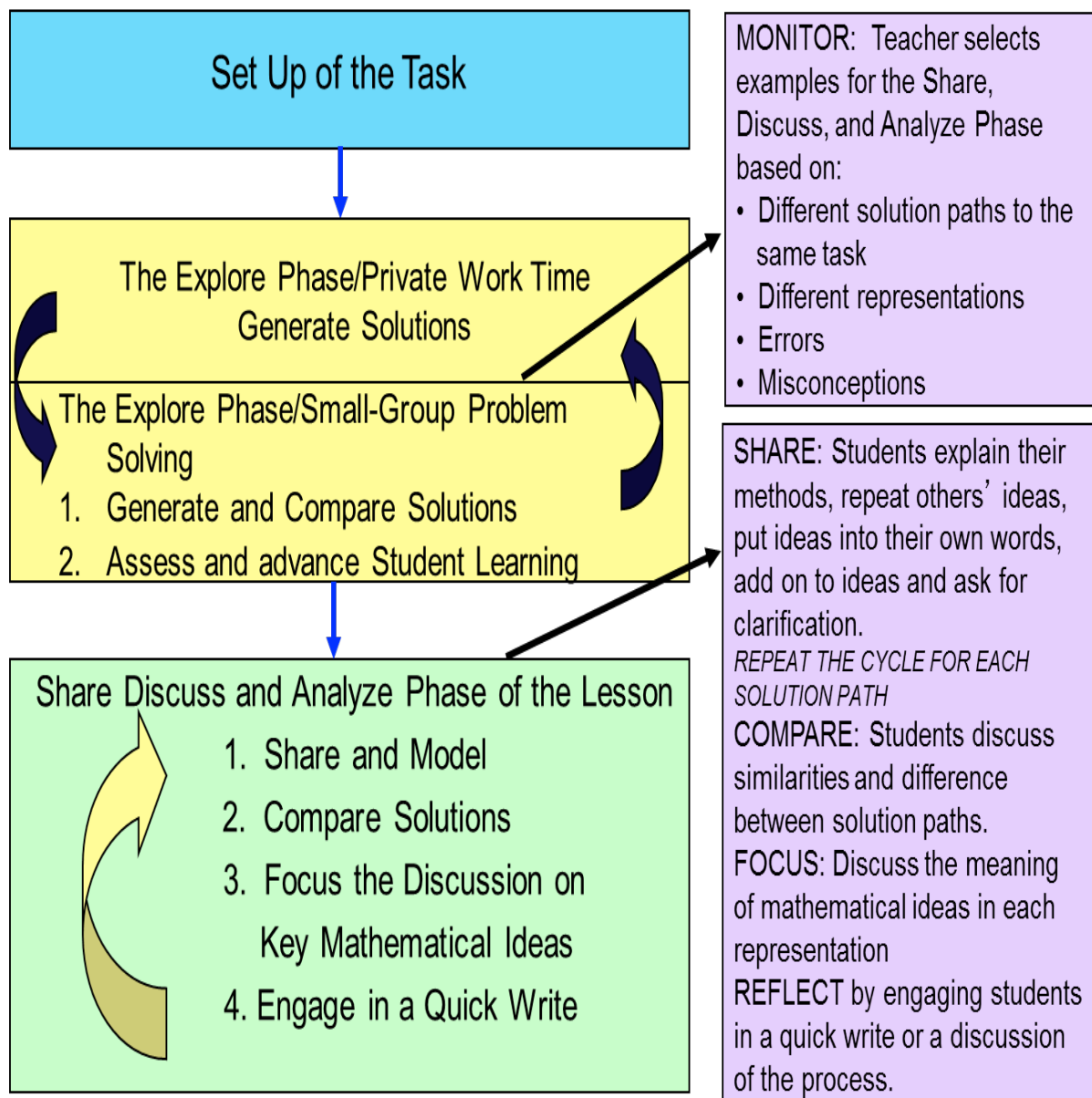
Accountability to Rigorous Thinking

- Synthesize several sources of information
- Construct explanations and text with understanding of concepts
- Formulate conjectures and hypotheses
- Employ generally accepted standards of reasoning
- Challenge the quality of evidence and reasoning

Accountable Talk[®] Chart

Talk Moves	Function	Example
To Ensure Purposeful, Coherent, and Productive Group Discussion		
Marketing	Direct attention to the value and importance of a student's contribution.	It is important to say describe to compare the size of the pieces and then to look at how many pieces if that size.
Challenging	Redirect a question back to the students or use students' contributions as a source for further challenge or query.	Let me challenge you: Is that always true?
Revoicing	Align a student's explanation with content or connect two or more contributions with the goal of advancing the discussion of the content.	You said 3, yes there are three columns and each column is 1/3 of the whole.
Recapping	Make public in a concise, coherent form, the group's achievement at creating a shared understanding of the phenomenon under discussion.	Let me put these ideas all together. What have we discovered?
To Support Accountability to Community		
Keeping the Channels Open	Ensure that students can hear each other, and remind them that they must hear what others have said.	Say that again and louder. Can someone repeat what was just said?
Keeping Everyone Together	Ensure that everyone not only heard, but also understood, what a speaker said.	Can someone add on to what was said? Did everyone hear that?
Linking Contributions	Make explicit the relationship between a new contribution and what has gone before.	Does anyone have a similar idea? Do you agree or disagree with what was said? Your idea sounds similar to his idea.
Verifying and Clarifying	Revoice a student's contribution, thereby helping both speakers and listeners to engage more profitably in the conversation.	So are you saying...? Can you say more? Who understood what was said?
To Support Accountability to Knowledge		
Pressing for Accuracy	Hold students accountable for the accuracy, credibility, and clarity of their contribution.	Why does that happen? Someone give me the term for that.
Building on Prior Knowledge	Tie a current contribution back to knowledge accumulated by the class at a previous time.	What have we learned in the past that links with this?
To Support Accountability to Rigorous Thinking		
Pressing for Reasoning	Elicit evidence to establish what contribution a student's utterance is intended to make within the group's larger enterprise.	Say why this works. What does this mean? Who can make a claim and then tell us what their claim means?
Expanding Reasoning	Open up extra time and space in the conversation for student reasoning.	Does the idea work if I change the context? Use bigger numbers?

Structures and Routines of a Lesson



Tennessee State Standards, Fluency in Mathematics

NCTM Principles and Standards for School Mathematics, p. 152, 2000

Fluency is not meant to come at the expense of conceptual understanding. Rather, it should result from a progression of learning and thoughtful practice. It is important for fluency to have students build conceptual understanding with skills; the roots of this conceptual understanding often occur one or more grades earlier in the standards than the grade when fluency is expected.

“Computational fluency refers to having efficient and accurate methods for computing. Students exhibit computational fluency when they demonstrate flexibility in the computational methods they choose, understand and can explain these methods, and produce accurate answers efficiently. The computational methods that a student uses should be based on mathematical ideas that the student understands well, including the structure of the base-ten number system, properties of multiplication and division, and number relationships.”

The following table shows fluency expectations. *TNReady fluency items will not allow calculators.

GRADE	STANDARD	EXPECTED FLUENCY
K	K.OA.A.5	Addition/Subtraction within 5
1	1.OA.C.6	Addition/Subtraction within 10
2	2.OA.B.2 2.NBT.B.5	Addition/Subtraction within 20 (Know single digit sums from memory) Addition/Subtraction within 100
3*	3.OA.C.7 3.NBT.A.2	Multiplication/Division within 100 (Know single digit products from memory) Addition/Subtraction within 1000
4*	4.NBT.B.4	Addition/Subtraction within 1,000,000
5*	5.NBT.B.5	Multi-digit multiplication
6*	6.NS.B.2 6.NS.B.3	Multi-digit division Multi-digit decimal operations
7	7.NS.A.1,2 7.EE.B.3 7.EE.B.4	Rational number arithmetic Multi-step problems with positive and negative rational numbers in any form One-variable equations of the form $px + q = r$ and $p(x + q) = r$
8	8.EE.C.7 8.G.C.9	One-variable linear equations, including cases with infinitely many or zero solutions Problems involving volumes of cones, cylinders, and spheres together with previous geometry work, proportional reasoning and multi-step problem solving in grade 7

NOTE: Only grades 3-6 will be assessed on fluency expectations.



Principles to Actions

EXECUTIVE SUMMARY

In 1989 the National Council of Teachers of Mathematics (NCTM) launched the standards-based education movement in North America with the release of *Curriculum and Evaluation Standards for School Mathematics*, an unprecedented initiative to promote systemic improvement in mathematics education. Now, twenty-five years later, the widespread adoption of college- and career-readiness standards, including adoption in the United States of the Common Core State Standards for Mathematics (CCSSM) by forty-five of the fifty states, provides an opportunity to reenergize and focus our commitment to significant improvement in mathematics education.


What is *different* and *promising* today, however, is the hope that the implementation of common standards, and the new generation of aligned and rigorous assessments, will help to address the continuing challenges and expand the progress already made. The need for coherent standards that promote college and career readiness has been endorsed across all states and provinces, whether or not they have adopted CCSSM. As NCTM publicly declared in the Position Statement *Supporting the Common Core State Standards for Mathematics*, released in 2013,

The widespread adoption of the Common Core State Standards for Mathematics presents an unprecedented opportunity for systemic improvement in mathematics education in the United States. The Common Core State Standards offer a foundation for the development of more rigorous, focused, and coherent mathematics curricula, instruction, and assessments that promote conceptual understanding and reasoning as well as skill fluency. This foundation will help to ensure that all students are ready for college and the workplace when they graduate from high school and that they are prepared to take their place as productive, full participants in society.

What is the *same* today is the need to understand that standards do not teach; teachers teach. New standards provide guidance and direction, and help focus and clarify common outcomes. They motivate the development of new instructional resources and assessments. But these standards do not tell teachers, coaches, administrators, parents, or policymakers what to do at the classroom, school, or district level or how to begin making essential changes to implement the standards. Moreover, they do not describe or prescribe the essential conditions required to ensure mathematical success for all students. Thus, the primary purpose of *Principles to Actions* is to fill this gap between the development and adoption of CCSSM and other standards and the enactment of practices, policies, programs, and actions required for their widespread and successful implementation. Its overarching message is that effective teaching is the nonnegotiable core that ensures that all students learn mathematics at high levels and that such teaching requires a range of actions at the state or provincial, district, school, and classroom levels.

Looking back at mathematics education and student achievement in mathematics, we find much to celebrate. As a result of the gradual implementation of a growing body of research on teaching and learning mathematics and the dedicated efforts of nearly two million teachers of mathematics in North America, student achievement is at historic highs. For example, the percentage of fourth graders scoring “proficient” or above on the National Assessment of Educational Progress (NAEP) rose from 13 percent in 1990 to 42 percent in 2013, and the percentage of eighth graders scoring “proficient” or above on the NAEP rose from 15 percent in 1990 to 36 percent in 2013. Between 1990





and 2013, mean SAT-Math scores increased from 501 in 1990 to 514 in 2013, mean ACT scores increased from 19.9 to 20.9, and the number of students taking Advanced Placement examinations in calculus and statistics increased substantially, from 77,634 in 1982 to 387,297 in 2013, and from 7,667 in 1997 to 169,508 in 2013, respectively.

These are impressive accomplishments. However, while we celebrate these record high NAEP scores and increases in SAT and ACT achievement—despite a significantly larger and more diverse range of test-takers—other recent data demonstrate that we are far from where we need to be and that much remains to be accomplished. For example, the average mathematics NAEP scores for 17-year-olds has been essentially flat since 1973; the difference in average NAEP mathematics scores between white and black and white and Hispanic 9- and 13-year-olds has narrowed somewhat between 1973 and 2012 but remains between 17 and 28 points; and among cohorts of 15-year-olds from the 34 countries participating in the 2012 Programme for International Student Assessment (PISA), the U.S. cohort ranked 26th in mathematics.

These more disturbing data point to the persistent challenges and the work that we still need to do to make mathematics achievement a reality for all students:

- ◆ Eliminate persistent racial, ethnic, and income achievement gaps so that all students have opportunities and supports to achieve high levels of mathematics learning
- ◆ Increase the level of mathematics learning of all students, so that they are college and career ready when they graduate from high school
- ◆ Increase the number of high school graduates, especially those from traditionally underrepresented groups, who are interested in, and prepared for, STEM careers

In short, we must move from “pockets of excellence” to “systemic excellence” by providing mathematics education that supports the learning of all students at the highest possible level.

To achieve this goal, we must change a range of troubling and unproductive realities that exist in too many classrooms, schools, and districts. *Principles to Actions* addresses and documents these realities:

- ◆ Too much focus is on learning procedures without any connection to meaning, understanding, or the applications that require these procedures.
- ◆ Too many students are limited by the lower expectations and narrower curricula of remedial tracks from which few ever emerge.
- ◆ Too many teachers have limited access to the instructional materials, tools, and technology that they need.
- ◆ Too much weight is placed on results from assessments—particularly large-scale, high-stakes assessments—that emphasize skills and fact recall and fail to give sufficient attention to problem solving and reasoning.
- ◆ Too many teachers of mathematics remain professionally isolated, without the benefits of collaborative structures and coaching, and with inadequate opportunities for professional development related to mathematics teaching and learning.

As a result, too few students—especially those from traditionally underrepresented groups—are attaining high levels of mathematics learning.

In this exciting and challenging context, NCTM introduces *Principles to Actions: Ensuring Mathematical Success for All*, setting forth a set of strongly recommended, research-informed actions, based on the Council’s core principles and intended for all educational leaders and policymakers, all school and district administrators, and all teachers, coaches, and specialists of mathematics. In *Principles and Standards for School Mathematics*, published by NCTM in 2000,

the Council first defined a set of Principles that “describe features of high-quality mathematics education.” *Principles to Actions* now articulates and builds on an updated set of six Guiding Principles that reflect more than a decade of experience and new research evidence about excellent mathematics programs, as well as significant obstacles and unproductive beliefs that continue to compromise progress.

Three aspects of *Principles to Actions* are new, provocative, and important. First, *Principles to Actions* devotes the largest section to Teaching and Learning, the first Guiding Principle, and describes and illustrates eight Mathematics Teaching Practices (see fig. 1) that research indicates need to be consistent components of every mathematics lesson. Second, for each Guiding Principle, *Principles to Actions* offers commentary and a table that address productive and unproductive beliefs as part of a realistic appraisal of the obstacles that we face, as well as suggestions for overcoming these obstacles. Third, *Principles to Actions* issues a forceful call to action, asserting that all of us who are stakeholders have a role to play and important actions to take if we are finally to recognize our critical need for a world where the mathematics education of our students draws from research, is informed by common sense and good judgment, and is driven by a nonnegotiable belief that we must develop mathematical understanding and self-confidence in *all* students.

Mathematics Teaching Practices
Establish mathematics goals to focus learning. Effective teaching of mathematics establishes clear goals for the mathematics that students are learning, situates goals within learning progressions, and uses the goals to guide instructional decisions.
Implement tasks that promote reasoning and problem solving. Effective teaching of mathematics engages students in solving and discussing tasks that promote mathematical reasoning and problem solving and allow multiple entry points and varied solution strategies.
Use and connect mathematical representations. Effective teaching of mathematics engages students in making connections among mathematical representations to deepen understanding of mathematics concepts and procedures and as tools for problem solving.
Facilitate meaningful mathematical discourse. Effective teaching of mathematics facilitates discourse among students to build shared understanding of mathematical ideas by analyzing and comparing student approaches and arguments.
Pose purposeful questions. Effective teaching of mathematics uses purposeful questions to assess and advance students’ reasoning and sense making about important mathematical ideas and relationships.
Build procedural fluency from conceptual understanding. Effective teaching of mathematics builds fluency with procedures on a foundation of conceptual understanding so that students, over time, become skillful in using procedures flexibly as they solve contextual and mathematical problems.
Support productive struggle in learning mathematics. Effective teaching of mathematics consistently provides students, individually and collectively, with opportunities and supports to engage in productive struggle as they grapple with mathematical ideas and relationships.
Elicit and use evidence of student thinking. Effective teaching of mathematics uses evidence of student thinking to assess progress toward mathematical understanding and to adjust instruction continually in ways that support and extend learning.

Fig. 1. Mathematics Teaching Practices

Guiding Principles for School Mathematics

Full statements of the Guiding Principles follow; *Principles to Actions* elaborates the unique importance of each, as summarized briefly below each statement. The first Guiding Principle, Teaching and Learning, has primacy among the Guiding Principles, with the others serving as the Essential Elements that support it.

Teaching and Learning. *An excellent mathematics program requires effective teaching that engages students in meaningful learning through individual and collaborative experiences that promote their ability to make sense of mathematical ideas and reason mathematically.*

The teaching of mathematics is complex. It requires teachers to have a deep understanding of the mathematical content that they are expected to teach and a clear view of how student learning of that mathematics develops and progresses across grades. It also calls for teachers to be skilled at using instructional practices that are effective in developing mathematics learning for all students. The eight Mathematics Teaching Practices (see fig. 1) describe the essential teaching skills derived from the research-based learning principles, as well as other knowledge of mathematics teaching that has emerged over the last two decades.

Access and Equity. *An excellent mathematics program requires that all students have access to a high-quality mathematics curriculum, effective teaching and learning, high expectations, and the support and resources needed to maximize their learning potential.*

Equitable access means high expectations, adequate time, consistent opportunities to learn, and strong support that enable students to be mathematically successful. Instead of one-size-fits-all practices and the differential expectations for students who are placed in different academic tracks, equitable access means accommodating differences to meet a common goal of high levels of learning by all students.

Curriculum. *An excellent mathematics program includes a curriculum that develops important mathematics along coherent learning progressions and develops connections among areas of mathematical study and between mathematics and the real world.*


A robust curriculum is more than a collection of activities; instead, it is a coherent sequencing of core mathematical ideas that are well articulated across the grades. Such an effective curriculum incorporates problems in contexts from everyday life and other subjects whenever possible. These tasks engage students and generate interest and curiosity in the topics under investigation.

Tools and Technology. *An excellent mathematics program integrates the use of mathematical tools and technology as essential resources to help students learn and make sense of mathematical ideas, reason mathematically, and communicate their mathematical thinking.*

Available tools and technology help teachers and students visualize and concretize mathematics abstractions, and when these resources are used appropriately, they support effective teaching and meaningful learning.

Assessment. *An excellent mathematics program ensures that assessment is an integral part of instruction, provides evidence of proficiency with important mathematics content and practices, includes a variety of strategies and data sources, and informs feedback to students, instructional decisions, and program improvement.*

Effective assessment supports and enhances the learning of important mathematics by furnishing useful formative and summative information to both teachers and students. Productive mathematics assessment is a process that is



coherently aligned with learning goals and makes deliberate use of the data gathered as evidence of learning and provides guidance for next instructional steps and programmatic decision making. Students learn to assess and recognize high quality in their own work.

Professionalism. *In an excellent mathematics program, educators hold themselves and their colleagues accountable for the mathematical success of every student and for personal and collective professional growth toward effective teaching and learning of mathematics.*

Effective schools communicate a tangible sense of the professional imperative to grow personally and collectively and to hold one another accountable for this growth. Professionals who are responsible for students' mathematics learning are never satisfied with their accomplishments and are always working to increase the impact that they have on their students' mathematics learning. Moreover, they cultivate and support a culture of professional collaboration and continual improvement that is driven by an abiding sense of interdependence and collective responsibility.

Actions

Although principles provide guidance and structure, actions determine impact. *Principles to Actions* argues that ensuring mathematical success for all will take **teachers** who, among other actions—

- ◆ plan and implement effective instruction as described by the Mathematics Teaching Practices;
- ◆ develop socially, emotionally, and academically safe environments for mathematics teaching and learning—environments in which students feel secure and confident in engaging with one another and with teachers;
- ◆ evaluate curricular materials and resources to determine the extent to which these materials align with the standards, ensure coherent development of topics within and across grades, promote the mathematical practices, and support effective instruction that implements the Mathematics Teaching Practices;
- ◆ incorporate mathematical tools and technology as an everyday part of the mathematics classroom, recognizing that students should experience “mathematical action technologies” and physical or virtual manipulatives to explore important mathematics;
- ◆ provide students with descriptive, accurate, and timely feedback on assessments, including strengths, weaknesses, and next steps for progress toward the learning targets;
- ◆ work collaboratively with colleagues to plan instruction, solve common challenges, and provide mutual support as they take collective responsibility for student learning.

Principles to Actions argues that ensuring mathematical success for all will take **principals, coaches, specialists, and other school leaders** who, among other actions—

- ◆ make the eight Mathematics Teaching Practices a schoolwide focus that is expected for all teachers to strengthen learning and teaching for all students, and provide professional development, training, and coaching to make the implementation of these practices a priority;
- ◆ maintain a schoolwide culture with high expectations and a growth mindset;

- ◆ allocate time for teachers to collaborate in professional learning communities;
- ◆ support improvement with multifaceted assessments used to monitor progress and inform changes to instruction;
- ◆ make the mathematical success of every student a nonnegotiable priority.

Principles to Actions argues that ensuring mathematical success for all will take **leaders and policymakers in districts, states or provinces, including commissioners, superintendents and other central office administrators**, who, among other actions—

- ◆ make ongoing professional development that supports the implementation of the eight Mathematics Teaching Practices as a priority;
- ◆ allocate resources to ensure that all students are provided with an appropriate amount of instructional time to maximize their learning potential;
- ◆ eliminate the tracking of low-achieving students and instead structure interventions that provide high-quality instruction and other classroom support, such as math coaches and specialists;
- ◆ understand the devastating impact of professional isolation and create collaborative structures to maximize professional growth;
- ◆ Support risk taking and encourage new approaches that advance student learning.

Only when these words become actions and the actions lead to more productive beliefs, new norms of instructional practice, and implementation of the essential supporting elements will we overcome the obstacles that currently prevent school mathematics from ensuring success for all students.

The National Council of Teachers of Mathematics is the world's largest professional organization dedicated to improving mathematics education for all students. Growing out of its visionary *Agenda for Action* in 1980, the Council launched the education standards movement with its publication of *Curriculum and Evaluation Standards for School Mathematics* (1989), which presented a comprehensive vision for mathematics teaching and learning in K–12 mathematics. In 2000, NCTM's *Principles and Standards for School Mathematics* expanded on the 1989 Standards and added underlying Principles for excellence in school mathematics. Subsequent publications, *Curriculum Focal Points for Prekindergarten through Grade 8 Mathematics: A Quest for Coherence* and *Focus in High School Mathematics: Reasoning and Sense Making*, extended this work by identifying the most significant mathematical concepts and skills at each level from prekindergarten through grade 8 and advocating practical changes to the high school mathematics curriculum to refocus learning on reasoning and sense making, respectively. These NCTM publications have significantly influenced the development of mathematics education standards worldwide. NCTM's recently published *Principles to Actions: Ensuring Mathematical Success for All* describes the principles and actions, including specific research-informed teaching practices, that are essential for a high-quality mathematics education for all students. The Council is committed to a constructive public dialogue to ensure a mathematics education of the highest quality for all students.

Mathematics Task Arcs

A task arc is a set of related lessons consisting of a series of instructional tasks and their associated lesson guides. The lessons are focused on a small number of standards within a domain of the Tennessee Academic Standards for Mathematics. In some cases a small number of related standards from more than one domain may be addressed.

Included in this task arc are a preview of the tasks and the content and practice standards associated with each task. Essential understandings which teachers strive to develop and solidify within their students across the arc are named in each lesson guide.

The tasks and lessons are sequenced in deliberate and intentional ways and are designed to be implemented consecutively and in their entirety. It is possible for students to develop a deep understanding of concepts because a small number of standards are targeted. Lesson concepts remain the same as the lessons progress; however, the context or representations may change.

Bias: Social, ethnic, racial, religious, and gender bias is best determined at the local level where educators have in-depth knowledge of the culture and values of the community in which students live. The TDOE asks local districts to review these curricular units for social, ethnic, racial, religious, and gender bias before use in local schools.

Copyright: These materials were developed with funds through a Math and Science Partnership (MSP) grant for the use of Tennessee educators. The format and framework for this task arc is adapted from the Sets of Related Lessons originally developed and copyrighted by the Institute for Learning (IFL) at the University of Pittsburgh (<http://ifl.pitt.edu/>).

Algebra 1/Core Math I: Equations and Inequalities

A Set of Related Tasks and Lesson Guides

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ARC OVERVIEW

In this set of related tasks, students create equations and inequalities in one variable, solve equations and inequalities in one variable, represent constraints by systems of equations and inequalities, graph linear inequalities in two variables, and approximate the solution(s) of the equation $f(x) = g(x)$. Tasks 1 – 3 focus on one variable equations and inequalities. Tasks 4 – 8 bring in systems of equations and inequalities and graphing a system of linear inequalities. Students must focus on viable solutions in the majority of the tasks. The Arc Preview table on page 4 provides all of the task questions contained in this arc. Note that the Essential Understandings listed in each task were taken from NCTM's Principles and Standards for School Mathematics. Tennessee State Mathematics Standards were retrieved from <http://www.tn.gov/education/standards/math.shtml>. These tasks are aligned to the As CED.1, As CED.3, As REI.11, As REI.12 Content Standards of the Tennessee Standards for Mathematics.

Through engaging in the lessons in this set of related tasks students will:

- Write and solve an equation and inequality in one variable given a table or contextual situation
- Compare a system of equations to a system of inequalities
- Write and solve a system of equations in two variables
- Create and graph a linear inequality with two variables
- Graph a system of inequalities
- Approximate the intersection between a linear equation and a polynomial equation
- Interpret solutions as viable and non-viable

By the end of these eight tasks, students will be able to answer the following overarching questions:

- How can you represent constraints with equations or inequalities?
- What steps would you use to solve a linear equation or inequality in one variable?
- What methods can be used to solve systems of linear equations?
- How do you graph a linear inequality in two variables?
- How do you solve a system of linear inequalities in two variables?
- What does it mean if a solution is viable or nonviable based on the context of a problem?
- Why are the x -coordinates of the intersection points of the equations, $y = f(x)$ and $y = g(x)$, the solutions of the equation $f(x) = g(x)$?

The assessing questions, advancing questions, and whole group questions provided in this guide will ensure that students are working in ways aligned to the Standards for Mathematical Practice. Although the students will not be aware that this is occurring, the teacher can guide the process so that each MP (Mathematical Practice) is covered through good explanations, understanding of context, and clarification of reasoning behind solutions.

The complete Task Arc Series can be found under the "For Leaders" section on the Tennessee Department of Education website.

Tab 6

Module Six:
Shared Leadership
and Planning

On Tab, write “Planning”

Summer 2015 Leadership Planning (Secondary)

For each module, reflect on your major take-aways and key actions needed from you as your begin to think about collaboration with your Learning Leaders/leadership team in supporting redelivery and framing of information from this summer's training. You will use these reflections as you create your ***Shared Leadership Planning Document*** later today.

Modules and Key Questions	Take-Aways and Key Leader Actions
1. How do teachers help build an understanding of the interconnectedness between reading and writing and its impact on instruction?	Take-Aways:
	Key Actions:
2. How do the literacy shifts in the new social studies expectations impact instructional practice?	Take-Aways:
	Key Actions:
4. How can leaders focus on supporting teachers to impact student success in mathematics?	Take-Aways:
	Key Actions:

As you prepare your redelivery plan, think through who in your school you need to have involved in planning, implementing, and supporting the Learning Leader. Who will deliver? When will these occur? How do you want to utilize them throughout the fall? Optional PLC guides can be found on the "For Leaders" page for your Learning Leaders/leadership team to collaboratively design your professional development and redelivery plan.

Redelivery Plan by Learning Leaders (Name)	Audience	Tentative Session Dates
___ English Language Arts _____ ___ Mathematics _____ ___ Social Studies _____	___ Grade Level ___ Teaching Teams ___ Departments ___ Whole Staff ___ Other _____ ___ Other _____	___ ½ day: _____ ___ 1 day: _____ ___ 1 hour PLC _____ ___ 2 hour PLC _____ ___ Other _____
<p>WHY?</p> <p>What is the purpose, cause, or belief that inspires this follow-up session? Refer to your <i>Tennessee Standards of Professional Learning</i> document to ground your thinking.</p>		
<p>HOW? (PLC Redelivery Guides)</p> <ol style="list-style-type: none"> 1. Date(s)? 2. Follow-up Session? 3. Resources? 4. Presenters? 		
<p>WHAT?</p> <ol style="list-style-type: none"> 1. What are the expected results? 2. Are clear targets for implementation defined and shared? Objectives? 3. How does the content relate to current knowledge and skills of staff members? 4. What will change in teacher practice as a result of this session? 5. How will you and your Learning Leaders/leadership team continue to support the expected changes? 		
<p>Paragraph Summary Based on my reflections and take-aways today, my key actions in planning for redelivery and engaging my Learning Leaders/leadership team to support this work are...</p>		

As you prepare your redelivery plan, think through who in your school you need to have involved in planning, implementing, and supporting the Learning Leader. Who will deliver? When will these occur? How do you want to utilize them throughout the fall? Optional PLC guides can be found on the “For Leaders” page for your Learning Leaders/leadership team to collaboratively design your professional development and redelivery plan.

Redelivery Plan by Learning Leaders (Name)	Audience	Tentative Session Dates
___ English Language Arts _____ ___ Mathematics _____ ___ Social Studies _____	___ Grade Level ___ Teaching Teams ___ Departments ___ Whole Staff ___ Other _____ ___ Other _____	___ ½ day: _____ ___ 1 day: _____ ___ 1 hour PLC _____ ___ 2 hour PLC _____ ___ Other _____
WHY? What is the purpose, cause, or belief that inspires this follow-up session? Refer to your <i>Tennessee Standards of Professional Learning</i> document to ground your thinking.		
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Redelivery Plan by Learning Leaders (Name)	Audience	Tentative Session Dates
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<p>WHAT?</p> <ol style="list-style-type: none"> 1. What are the expected results? 2. Are clear targets for implementation defined and shared? Objectives? 3. How does the content relate to current knowledge and skills of staff members? 4. What will change in teacher practice as a result of this session? 5. How will you and your Learning Leaders/leadership team continue to support the expected changes? 		
<p>Paragraph Summary Based on my reflections and take-aways today, my key actions in planning for redelivery and engaging my Learning Leaders/leadership team to support this work are...</p>		

Tab 7

Module Seven:

MICA and Technology Resources

On Tab, write “MICA and Tech”



TNReady Practice Tools for Teachers

Beginning in the 2015-16 school year, TNReady will be the state's new student achievement assessment in reading, writing, and math in grades 3–11. TNReady will replace the state's TCAP multiple-choice only tests in reading and math and will include a variety of question types as well as writing. This assessment has been designed by Tennessee educators to better assess student knowledge, as well as critical thinking and problem-solving skills – in short, all the things students will need to succeed following high school.

Free and Early Access to Online Tools

The best preparation for TNReady will come from high quality teaching and engaged student learning taking place throughout the year. We also believe it is critical that teachers have access to practice tools early and often.

Beginning at the end of May, teachers will have access to online practice software called MICA. MICA will allow teachers to access the TNReady Item Sampler. Phase I of MICA will allow teachers to view 8-12 sample questions per grade level and subject.

Beginning in the 2015-16 school year, teachers and students will have access to Phase II of the MICA tool. This will allow educators to create classroom assessments that reflect the types of questions on TNReady. Phase II of the Item Sampler will provide 40 – 50 questions per grade and subject from which teachers can create assessments to aid in their instruction throughout the year. In addition, beginning in October, teachers and students will have access to a practice test via the MIST platform, which is the same application students will use to complete TNReady. The practice test is mini-version of a full-length test that will help students gain a better understanding of the expectations for the new TNReady assessment.

Much like teachers already do in their classrooms, TNReady will give students a variety of new ways to show what they really know and can do. These assessments will be more engaging for students because they are interactive and taken online.

First Release of Online Practice Tools

The following pages include additional information about Phase I of MICA, the online practice software for teachers and students. Please take a moment to review this information, including screen shots, to get a better sense of what teacher rosters, practice score reports, and practice questions will actually look like in the online practice tool.

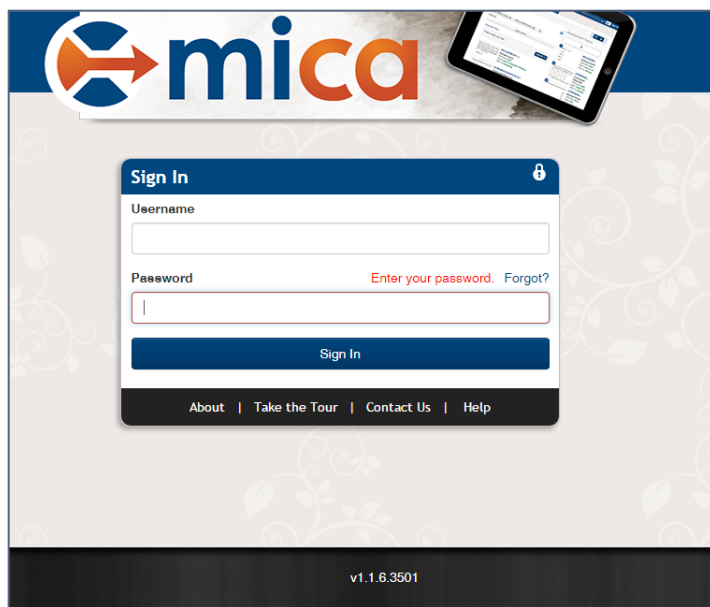
Additional Information

Please visit <http://tn.gov/TNReady> to find more about TNReady, including:

- Downloadable assessment blueprints for each grade and subject
- Example question types
- Details about both the English language arts and math assessment.

TNReady Item Sampler – Phase I Release, Week of May 18

MICA (Measurement Inc. Classroom Assessment) is the web-based platform to access the TNReady Item Sampler. Teachers can use the Item Sampler throughout the year to create assessments that reflect the types of items on the TNReady. Phase I of the MICA release will provide access for teachers only. It will include 8 – 12 items per grade level, per subject.



The Item Sampler will allow teachers to add students from their class roster beginning in August 2015, during the Phase II release. This is a screenshot of a sample class roster.

A screenshot of the MICA Class Roster page. The page has a dark blue header with the MICA logo on the left and links for 'Accessibility', 'Notifications', and 'Account' on the right. Below the header is a navigation bar with four tabs: 'CLASSES', 'ASSESSMENTS', 'REPORTS', and 'PRACTICE'. The 'CLASSES' tab is selected. Below the navigation bar is a light blue banner that says 'Click [here](#) to complete the Practice Tool survey.' Below the banner are two tabs: 'English Language Arts' and 'Mathematics'. The 'Mathematics' tab is selected. To the right of the tabs is a '+ Create New Class' button. Below the tabs is a section titled 'Assigned Assessments' with a 'Switch to printable view' link. To the right of this section are three buttons: '+ Add', 'Edit', and 'Delete'. Below these buttons is a table with the following columns: 'Last name', 'First name', 'Username', 'Password', and 'Last Login'. The table contains five rows of student data. At the bottom of the table is a 'Showing 1 to 5 of 5 entries' label and two navigation arrows (left and right).

<input type="checkbox"/>	Last name	First name	Username	Password	Last Login
<input type="checkbox"/>	Diaz	Anna	demo.Anna.Diaz	.....	Never
<input type="checkbox"/>	Hill	Zachary	demo.Zachary.Hill	.....	Never
<input type="checkbox"/>	Martinez	Robert	demo.Robert.Martinez	.....	Never
<input type="checkbox"/>	Morris	Joyce	demo.Joyce.Morris	.....	Never
<input type="checkbox"/>	Ross	Rachel	demo.Rachel.Ross	.....	Never

TNReady Item Sampler – Phase I Release, Week of May 18

Teachers will be able to build assessments using questions from the bank included in the Item Sampler. The items will be reviewed by Tennessee teachers to ensure alignment with state standards. The Phase II release will include 25 – 40 additional items per grade and subject.

The screenshot shows the MICA Assessments page. At the top, there are tabs for CLASSES, ASSESSMENTS, REPORTS, and PRACTICE. Below the tabs, there is a link to complete the Practice Tool survey. The main heading is "Assessments" with a "+ Create an assessment" button. Below this, there are buttons for Delete, Edit, Preview, Clone, and Assign. A table lists the assessments:

	Name	Create Date	Assigned
<input checked="" type="checkbox"/>	Nathan's English Language Arts Pre Course Mock Exam 1	4/7/2015	✓
<input type="checkbox"/>	Nathan's English Language Arts Pre Course Mock Exam 2	4/7/2015	✓
<input type="checkbox"/>	Nathan's English Language Arts Post Course Mock Exam 1	4/7/2015	✓
<input type="checkbox"/>	Nathan's English Language Arts Post Course Mock Exam 2	4/7/2015	✓
<input type="checkbox"/>	Nathan's English Language Arts Post Course Mock Exam 3	4/7/2015	✓
<input type="checkbox"/>	Nathan's English Language Arts Post Course Mock Exam 4	4/7/2015	✓

Showing 1 to 6 of 6 entries

The screenshot shows the MICA Assessments page in the "Assign Assessment" step. The top navigation bar is the same. Below the tabs, there is a link to complete the Practice Tool survey. The main heading is "Assign Assessment". On the left, there is a list of questions for "Nathan's English Language Arts Pre Course". The questions are ordered by difficulty and standards. On the right, there is a pie chart showing the difficulty distribution of the questions: Easy (green), Medium (yellow), and Hard (red). Below the pie chart, there is a bar chart showing the standards distribution of the questions. The standards are listed on the left, and the number of questions for each standard is shown on the right.

Standards

Standard	Count
9-10.RI.4	2
9-10.RI.1	3
9-10.L.4	1
9-10.RL.4	1
9-10.L.8	1
9-10.RI.6	1
9-10.RI.5	1

RBT

RBT	Count
Remember	0
Understand	5
Apply	1
Analyze	4
Evaluate	0
Create	0

Teachers can build each assessment based on the standard, level of difficulty, and higher order thinking skill level. Teachers can reorder questions and clone assessments to create pre- and post-tests.

TNReady Item Sampler – Phase I Release, Week of May 18

When students complete the assessment, they will use an interface that mimics the MIST platform for TNReady. All the same accessibility features will be available, with the exception of text-to-speech.

The screenshot shows the MICA assessment interface. At the top, there is a blue header with the MICA logo and links for Accessibility, Notifications, and Account. Below the header, there is a navigation bar with a list icon, a Done button, and Previous/Next buttons. The main content area displays a reading passage titled "Scholars Search for the Real Trojan War" and a multiple-choice question. The question asks which phrase from the passage best describes how most of these places appear today. The options are: A "irreparably compromised sites", B "ruins of cyclopean walls", C "villages of little importance", and D "thriving settlement[s] . . . with palaces". A yellow banner at the bottom states: "You are viewing this assessment in preview mode. Nothing you do here is saved."

Scholars Search for the Real Trojan War

1 For thousands of years, people have been entertained and inspired by Homer's two epic poems, *The Iliad* and *The Odyssey*, and many have wondered if these stories could be true. In ancient times, most people believed that they were true—that *The Iliad* especially was literally history. In more modern times, scholars have dismissed the historical aspects of *The Iliad*. They believed that while the poems were great works of art, they were fictional.

Linguists have identified many of the locations mentioned in *The Iliad*. Which phrase from the passage **best** describes how most of these places appear today?

- A "irreparably compromised sites"
- B "ruins of cyclopean walls"
- C "villages of little importance"
- D "thriving settlement[s] . . . with palaces"

You are viewing this assessment in **preview mode**. Nothing you do here is saved.

Teachers will be able to immediately review student performance on machine-scored items. They will also be able to enter results into MICA for rubric-scored items. MICA will provide reports at the student, assessment, and class level.

The screenshot shows the MICA dashboard. At the top, there is a blue header with the MICA logo and links for Accessibility, Notifications, and Account. Below the header, there is a navigation bar with tabs for CLASSES, ASSESSMENTS, REPORTS, and PRACTICE. The main content area displays three report sections: Students, Assessments, and Classes. Each section includes a thumbnail image of a report and a brief description of the report's content.

Students

The **Students** report provides the teacher with quick access to individual student portfolios. Student portfolios are available for each content area class and displays standard proficiency through a pre- and post-assessment comparison and a monthly progress report.

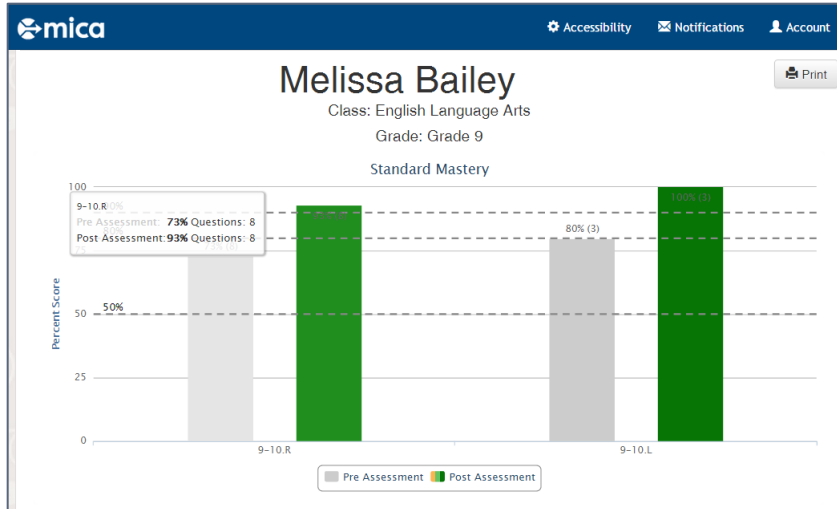
Assessments

The **Assessments** report offers a comprehensive analysis of class performance on a specific assessment including the high, low, and average score, a breakdown of standards measured in the assessment, scores for each student, and an item analysis.

Classes

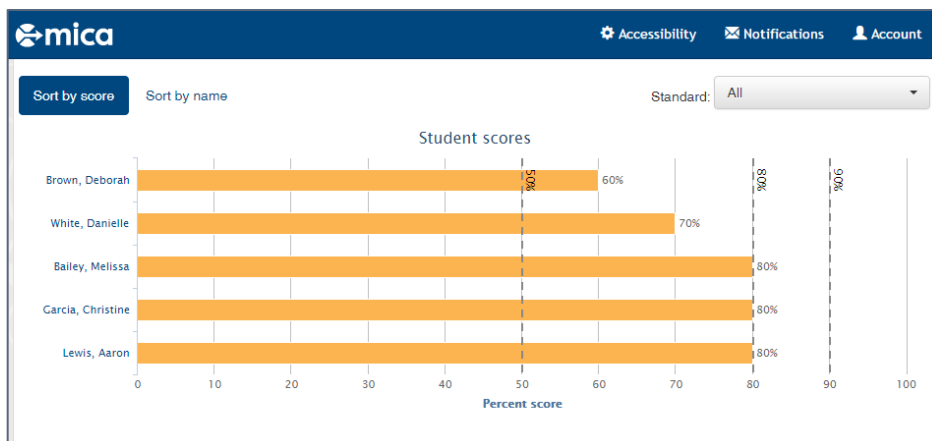
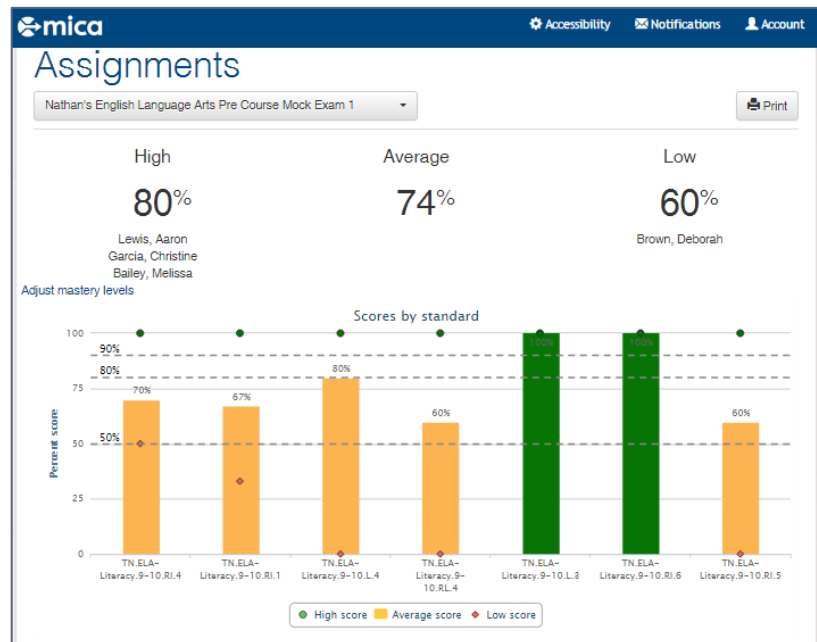
The **Classes** report shows a broad view of progress for each class and student including a comparison of pre- and post-assessment content area and standard mastery, a monthly progress chart to show growth over time, and student performance on a specified standard.

TNReady Item Sampler – Phase I Release, Week of May 18



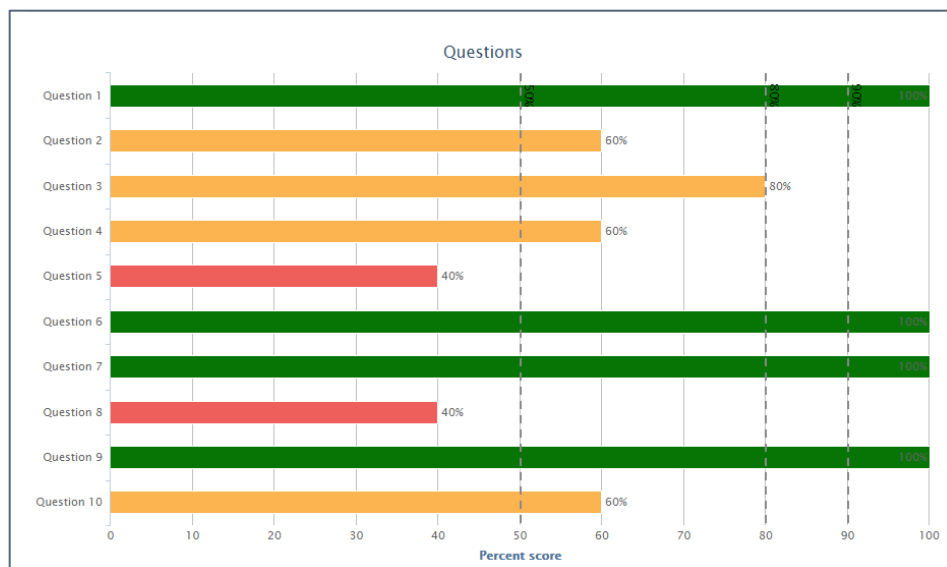
Student reports show performance by standard mastery or by assignment/assessment.

Teachers can also review overall performance on a particular assignment. This report shows how students performed on ELA Mock Exam 1, by student and standard.



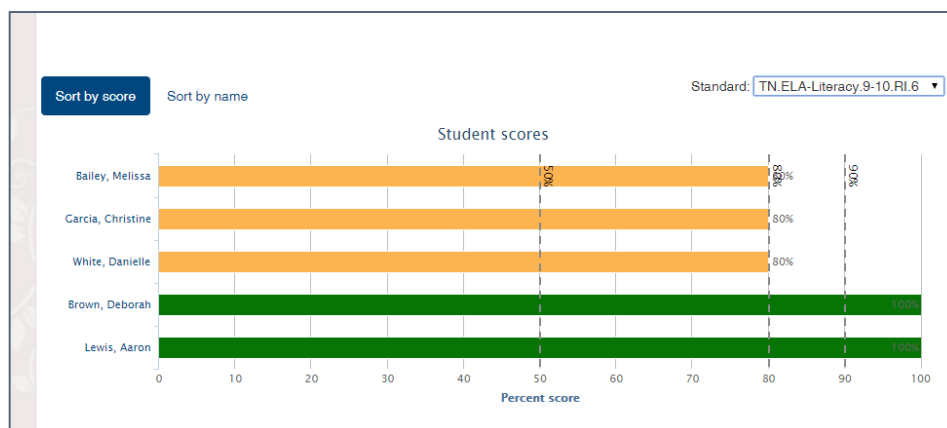
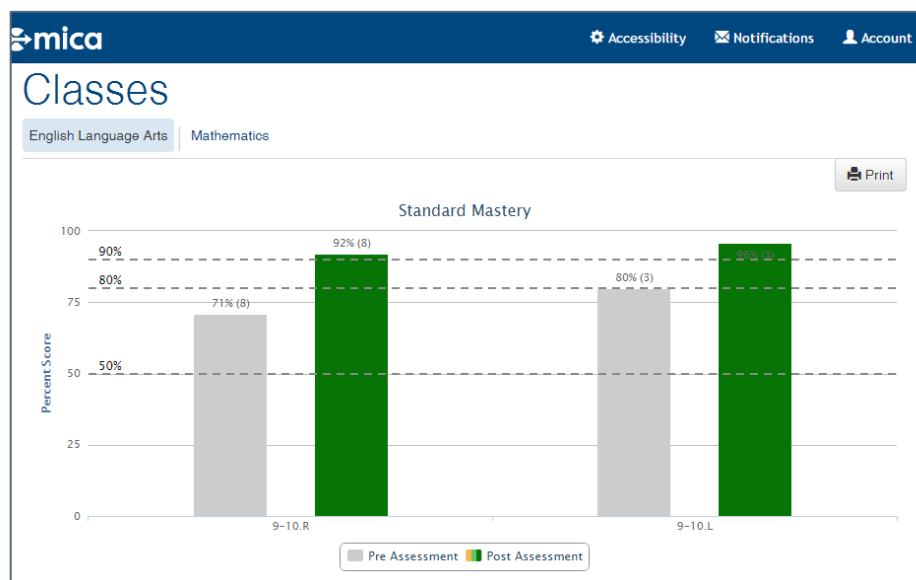
This table shows student scores on an assignment across all standards.

TNReady Item Sampler – Phase I Release, Week of May 18



Teachers can also look at student performance by question on a particular assessment.

The final report type is by class. Teachers can review student performance by standard as a roll-up across multiple assignments.



Class reports can also be displayed by individual student across multiple assignments and isolated by standard.

MICA Notes Tracker

Topic	Key Points	Other Notes/Plans
Access		
Setting Up Accounts		
Teacher Use		
Ideas I have for my school:		

Middle School Technology Resources

Instructional Use

Disclaimer: All of the recommended sites for student use are free, fair, open sites on the Internet. As such, links may not always be operational. Additionally, the State assumes no responsibility for what may be posted on any open source site: Teachers must preview all information before suggesting content to students.

Title: StoryBird

Website: <http://storybird.com>

Description: Storybird reverses visual storytelling by starting with the image and "unlocking" the story inside. Students explore artists, get inspired, and write stories to match existing art. Though this site focuses on writing, students can also read others' pieces.

Levels of Technology Access

☒ High
 ☒ Medium
 ☐ Low

Strands Addressed

☐ Reading Informational
 ☐ Reading Literature
 ☒ Writing
☐ Speaking and Listening
 ☐ Language

Special Notes

☒ Students can publish online

Title: NEWSELA

Website: <https://newsela.com/>

Description: NEWSELA builds comprehension with nonfiction text that springs from daily news. NEWSELA can format all articles at five different comprehension levels for students who have varying reading ability.

Levels of Technology Access

☒ High
 ☒ Medium
 ☒ Low

Strands Addressed

☒ Reading Informational
 ☒ Reading Literature
 ☐ Writing
☐ Speaking and Listening
 ☐ Language

Special Notes

- ☒ Different versions of the articles could be printed for students who do not have full tech access

Title: PBS Learning Media

Website: <http://www.pbslearningmedia.org/>

Description: PBS LearningMedia™ is your destination for direct access to thousands of classroom-ready, curriculum-targeted digital resources. PBS LearningMedia builds on the strength of public media and is designed to improve teacher effectiveness and student achievement.

Levels of Technology Access

- ☒ High ☒ Medium ☒ Low

Strands Addressed

- ☒ Reading Informational ☐ Reading Literature ☐ Writing
☒ Speaking and Listening ☐ Language

Special Notes

- ☒ Access to many videos across content areas in addition to ELA

Title: Kahoot

Website: <https://getkahoot.com/>

Description: This program allows teachers to create quizzes, flashcards, and review games, with students using computers, cell phones, or other devices.

Levels of Technology Access

- ☒ High ☒ Medium ☐ Low

Strands Addressed

- ☒ Reading Informational ☒ Reading Literature ☒ Writing
☒ Speaking and Listening ☒ Language

Special Notes

- ☒ Teachers create questions for students to respond to electronically

Title: It's All About Adolescent Literacy

Website: <http://www.adlit.org/>

Description: Adlit.org is a national multimedia project offering information and resources to parents and educators of struggling adolescent readers and writers.

Levels of Technology Access

☒ High ☒ Medium ☒ Low

Strands Addressed

☒ Reading Informational ☒ Reading Literature ☐ Writing
☐ Speaking and Listening ☐ Language

Special Notes

☒ Focused specifically on struggling readers and writers

Title: Smithsonian Teen Tribune

Website: <http://tweentribune.com/teen>

Description: TeenTribune, TweenTribune, TTEspañol and TTJunior (hereinafter collectively referred to as "TTribune") is a free online educational service offered by the Smithsonian for use by K-12 grade teachers and students. TTribune consists of daily news sites for kids, tweens, and teens, and includes text, photos, graphics, and audio and/or video materials prepared by the Smithsonian and others about current events, history, art, culture and science. TTribune also includes lessons, instructional and assessment tools, and opportunities for the registered users to communicate with other participants. TTribune is a moderated comment sharing community where registered teachers can assign educational content (like news stories) to students and the students using a screen name have the ability to create comments which, if approved by their teacher, are then published either to the other students within the Teacher's TTribune classroom page, or publicly on TTribune.

Levels of Technology Access

☒ High ☒ Medium ☒ Low

Strands Addressed

☒ Reading Informational ☒ Reading Literature ☐ Writing
☐ Speaking and Listening ☐ Language

Special Notes

None

Title: Prezi

Website: <http://prezi.com/>

Description: Prezi allows students to create engaging presentations.

Levels of Technology Access

☒ High ☐ Medium ☐ Low

Strands Addressed

☐ Reading Informational ☐ Reading Literature ☒ Writing
☐ Speaking and Listening ☐ Language

Special Notes

None

Title: Learning Games for Kids

Website: http://www.learninggamesforkids.com/keyboarding_games.html

Description: Helps develop keyboarding skills for students through the use of online games.

Levels of Technology Access

☒ High ☒ Medium ☐ Low

Strands Addressed

☐ Reading Informational ☐ Reading Literature ☒ Writing
☐ Speaking and Listening ☐ Language

Special Notes

☒ Develops keyboarding skills

Title: Snap Guide

Website: <https://snapguide.com/>

Description: Create your own “how to” guide for any topic.

Levels of Technology Access

☒ High ☒ Medium ☐ Low

Strands Addressed

☐ Reading Informational ☐ Reading Literature ☒ Writing
☐ Speaking and Listening ☐ Language

Special Notes

- ☐ Develops keyboarding skills
- ☐ Might be a method to assess sequencing skills in an engaging way

Title: Literacy Design Collaborative

Website: <http://ldc.org/>

Description: LDC is a national community of educators providing a teacher-designed and research-proven framework, online tools, and resources for creating literacy-rich assignments and courses across content areas.

Levels of Technology Access

☒ High ☒ Medium ☒ Low

Strands Addressed

☒ Reading Informational ☒ Reading Literature ☒ Writing
☐ Speaking and Listening ☒ Language

Special Notes

None

High School Literacy Technology Resources

Instructional Use

Disclaimer: All of the recommended sites for student use are free, fair, open sites on the Internet. As such, links may not always be operational. Additionally, the State assumes no responsibility for what may be posted on any open source site: Teachers must preview all information before suggesting content to students.

Title: Project Gutenberg

Website: <http://www.gutenberg.org/>

Description: Project Gutenberg offers over 46,000 free ebooks. No fee or registration is required. Books include classics like A Tale of Two Cities, The Yellow Wallpaper, Beowulf and Dracula.

Levels of Technology Access

☒ High
 ☒ Medium
 ☒ Low

Strands Addressed

☒ Reading Literature
 ☒ Reading Informational
 ☐ Writing
☐ Speaking and Listening
 ☐ Language

Special Notes

- ☒ At home internet access would be a strong benefit
- ☒ Classrooms with limited technology could utilize this resource by pulling up a selection of text to project on a whiteboard (for access during close reading whole group activities, etc.).

Title: American Rhetoric

Website: <http://www.americanrhetoric.com/>

Description: This site has the full text, audio, and video database of the 100 most significant American political speeches of the 20th century.

Levels of Technology Access

☐ High
 ☐ Medium
 ☒ Low

Strands Addressed

☒ Reading Literature
 ☒ Reading Informational
 ☐ Writing
☒ Speaking and Listening
 ☐ Language

Special Notes

- ☒ Classrooms with limited access could have students listen to the speeches while they are played from a central computer or device

Title: NEWSELA

Website: <https://newsela.com/>

Description: NEWSELA builds comprehension with nonfiction text that springs from daily news. NEWSELA can format all articles at five different comprehension levels for students who have varying reading ability.

Levels of Technology Access

- ☒ High
- ☒ Medium
- ☒ Low

Strands Addressed

- ☒ Reading Literature
- ☒ Reading Informational
- ☐ Writing
- ☐ Speaking and Listening
- ☐ Language

Special Notes

- ☒ Different versions of the articles could be printed for students who do not have full tech access

Title: Citation Machine

Website: citationmachine.net

Description: Citation Machine automatically generates citations for students using primary sources in MLA, APA, Chicago, and Turabian styles.

Levels of Technology Access

- ☒ High
- ☒ Medium
- ☐ Low

Strands Addressed

- ☐ Reading Literature
- ☐ Reading Informational
- ☐ Writing
- ☐ Speaking and Listening
- ☒ Language

Special Notes

- ☐ Develops keyboarding skills
- ☒ Students can use Citation Machine to generate citations automatically

Title: PBS Learning Media

Website: <http://www.pbslearningmedia.org/>

Description: PBS LearningMedia™ is your destination for direct access to thousands of classroom-ready, curriculum-targeted digital resources. PBS LearningMedia builds on the strength of public media and is designed to improve teacher effectiveness and student achievement.

Levels of Technology Access

☒ High ☒ Medium ☒ Low

Strands Addressed

☒ Reading Informational ☐ Reading Literature ☐ Writing
☒ Speaking and Listening ☐ Language

Special Notes

☐ Develops keyboarding skills ☒ Access to many videos across content areas in addition to ELA

Title: Keybr

Website: <http://www.keybr.com/#!game>

Description: Typing practice software that employs statistics and algorithms to help users gain keyboarding practice best suited to their needs.

Levels of Technology Access

☒ High ☒ Medium ☐ Low

Strands Addressed

☐ Reading Literature ☐ Reading Informational ☒ Writing
☐ Speaking and Listening ☐ Language

Special Notes

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Levels of Technology Access

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Strands Addressed

☒ Reading Informational ☒ Reading Literature ☒ Writing
☐ Speaking and Listening ☒ Language

Special Notes

☐ Develops keyboarding skills

Title: It's All About Adolescent Literacy

Website: <http://www.adlit.org/>

Description: Adlit.org is a national multimedia project offering information and resources to the parent and educators of struggling adolescent readers and writers

Levels of Technology Access

☒ High ☒ Medium ☒ Low

Strands Addressed

☐ Reading Foundational ☒ Reading Informational ☒ Reading Literature
☐ Writing ☐ Speaking and Listening ☐ Language

Special Notes

☐ Develops keyboarding skills ☒ Focused specifically on struggling readers and writers

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Strands Addressed

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☐ Writing ☐ Speaking and Listening ☐ Language

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Special Notes

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Tennessee Department of Education

Summer 2015 Leadership Course

Contact Information:

With questions, please contact:

- TNcore.questions@tn.gov
- Your facilitators

Your facilitators today were:

Name_____ Email:_____

Name_____ Email:_____



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